IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF INDIANA
HAMMOND DIVISION

UNITED STATES OF AMERICA, THE STATE OF INDIANA, and THE STATE OF OHIO, Plaintiffs, v. ARCELORMITTAL USA LLC, ARCELORMITTAL BURNS HARBOR LLC, and ARCELORMITTAL CLEVELAND LLC Defendants.	)	Civil No. 2:19-cv-00179 CONSENT DECREE

TABLE OF CONTENTS

I. INTRODUCTION

A. Plaintiffs United States of America, on behalf of the United States Environmental Protection Agency ("EPA"), the State of Indiana (or "Indiana"), on behalf of the Indiana Department of Environmental Management ("IDEM"), and the State of Ohio (or "Ohio"), on behalf of the Ohio Environmental Protection Agency (or "Ohio EPA"), have filed a complaint in this action (collectively, "Plaintiffs"), concurrently with the lodging of this Consent Decree, pursuant to Sections 113(b) and 304(a)(1) of the Clean Air Act, 42 U.S.C. §§ 7413(b) and 7604(a)(1) (the "Act"), alleging that the defendants, ArcelorMittal USA LLC, ArcelorMittal Burns Harbor LLC, and ArcelorMittal Cleveland LLC, at the steel plants they individually operate in East Chicago, Indiana; Burns Harbor, Indiana; and Cleveland, Ohio, have violated Sections 110, 111, 112 and 502 of the Act, 42 U.S.C. §§ 7410, 7411, 7412, and 7661a.

B. The Complaint filed against the Defendants seeks injunctive relief and the assessment of civil penalties for alleged violations of, *inter alia*:

1. the National Emission Standards for Hazardous Air Pollutants ("NESHAPs") for Integrated Iron and Steel Manufacturing Facilities promulgated under Section 112 of the Act, 42 U.S.C. § 7412, and the implementing regulations at 40 C.F.R Part 63, Subpart FFFFF;

2. the NESHAP for Coke Ovens: Pushing, Quenching, and Battery Stacks promulgated under Section 112 of the Act, 42 U.S.C. § 7412, and the implementing regulations at 40 C.F.R Part 63, Subpart CCCCC;

3. the NESHAP for Steel Pickling and HCL Processing Facilities and Hydrochloric Acid Regeneration Plants promulgated under Section 112 of the Act, 42 U.S.C. § 7412, and the implementing regulations at 40 C.F.R Part 63, Subpart CCC;

4. the New Source Performance Standards ("NSPS") Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygenated Decarburization Vessels Constructed After August 17, 1983, promulgated under Section 111 of the Act, 42 U.S.C. § 7411, and the implementing regulations at 40 C.F.R. Part 60, Subpart AAa (collectively, "NSPS Requirements");

5. Title V operating permit requirements and Sections 501 to 507 of the Act, 42 U.S.C. §§ 7661-7661f, and regulations promulgated thereunder at 40 C.F.R. Parts 70 and 71 (collectively, "Title V Requirements"); and

6. the federally-enforceable State Implementation Plans ("SIPs") and other state rules developed by the State of Indiana ("Indiana SIP") and the State of Ohio ("Ohio SIP"), which incorporate or implement the above requirements, and which establish federally enforceable permitting programs for construction and operation of new and modified sources.

C. In 2011 and 2019, the EPA issued Notices of Violation and Findings of Violation ("NOVs/FOVs") to ArcelorMittal Cleveland for alleged violations at its steel facility in Cleveland, Ohio.

D. In 2011 and 2019, the EPA issued NOVs/FOVs to ArcelorMittal Indiana Harbor East for alleged violations at its steel facilities in East Chicago, Indiana.

E. In 2011 and 2019, the EPA issued NOVs/FOVs to ArcelorMittal Indiana Harbor West for alleged violations at its steel facility in East Chicago, Indiana.

F. In 2011 and 2019, the EPA issued NOVs/FOVs to ArcelorMittal Burns Harbor for alleged violations at its facility in Burns Harbor, Indiana.

G. On December 31, 2017, ArcelorMittal Indiana Harbor LLC was merged into ArcelorMittal USA LLC.

H. The ArcelorMittal Indiana Harbor West Sinter Plant has been idle since November 2008. The Defendants acknowledge that it has not been functionally maintained and will require substantial capital expenditure to restart.

I. The Indiana Harbor East Facility's Electric Arc Furnace ("EAF") shop was permanently shut down in July 2015 and has been partially dismantled.

J. Since 2007, ArcelorMittal Cleveland has implemented numerous Clean Air Act compliance related programs and projects that reduced emissions involving inspection, repair, preventative maintenance, operating practice improvements, process control, operating data collection analysis and facility performance assessment, emissions control technology improvements and clean-fuel usage. These programs include: reestablishing operating parameters at the No. 1 Basic Oxygen Furnace ("BOF") secondary baghouse, upgrading the No. 1 BOF secondary baghouse control system, replacing the No. 2 BOF electrostatic precipitator waste gas main ductwork to No. 95 furnace and the downcomer ductwork, automating the No. 2 BOF process controls, conducting rigorous annual inspections and maintenance of the No. 2 BOF electrostatic precipitator, and updating standard operating procedures/work practices.

K. Since 2007, ArcelorMittal Indiana Harbor East has implemented numerous Clean Air Act compliance related programs and projects that reduced emissions including: primary and secondary scrubber improvements and scrap management improvements at the No. 2 BOF, revising pugh ladle maintenance practices, replacing dust removal equipment and adding process control interlocks on the hot metal baghouses, improving maintenance scheduling and performance tracking at the No. 4 BOF, gas cleaning system improvements at the No. 6 Blast Furnace, casthouse runner cover, fume evacuation, system and dust catcher improvements at the

No. 7 Blast Furnace, updating standard operating procedures/ work practices at multiple operations and installing a new scrubber system at the now idle EAF/LMF steelmaking shop.

L. Since 2007, ArcelorMittal Indiana Harbor West has completed numerous Clean Air Act compliance related projects that reduced emissions including: repairs to the sinter plant windbox, installing wind break screens and curtains, changing clay used in mudguns, and reestablishing operating parameters at the Nos. 3 and 4 Blast Furnaces, completing a hydrodynamic modeling evaluation of No. 3 BOF fume capture operations resulting in revised operating procedures, improving scrap management, upgrading the continuous opacity monitor, replacing the electrostatic precipitator stack, replacing the downcomer ductwork, upgrading automatic voltage controls for the electrostatic precipitator, revising electrostatic precipitator maintenance and cleaning practices, improving oxygen lance controls, and upgrading Programmable Logic Controller ("PLC") controls for the hot metal baghouse at the No. 3 BOF; and updating standard operating procedures/work practices.

M. Since 2007, ArcelorMittal Burns Harbor has completed a number of Clean Air Act compliance related projects and programs that reduced emissions including: fuel usage changes, upgrading the lime system and revising the maintenance schedule at the sinter plant, reestablishing operating parameters and completing significant PLC/programming and related systems enhancements at the C and D Blast Furnaces, BOF, and coke oven batteries, physical improvements to the iron beaching area; and updating standard operating procedures/work practices.

N. The Clean Air Act compliance related programs and projects completed at ArcelorMittal Indiana Harbor East, ArcelorMittal Indiana Harbor West, ArcelorMittal Burns Harbor, and ArcelorMittal Cleveland, the use of cleaner burning fuels and termination of certain

iron making, steelmaking, and sintering operations, have resulted in significant reduction of particulate matter, carbon monoxide, volatile organic compounds, nitrogen oxides and sulfur dioxide emissions. Such emission reductions total in excess of 14,100 tons per year.

O. During the period of time addressed by this Consent Decree, Defendants state that ArcelorMittal Indiana Harbor East, ArcelorMittal Indiana Harbor West, ArcelorMittal Burns Harbor, and ArcelorMittal Cleveland collectively spent a total of no less than $22.5 million on the compliance related projects and programs specified in paragraphs J, K, L, and M above. In addition, cost estimates to comply with Article VI, paragraphs 13 through 16, are expected to exceed $1.0 million.

P. All Defendants deny any liability to the United States or the States of Indiana or Ohio arising out of the transactions or occurrences alleged in the Complaint.

Q. The Parties recognize, and this Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation between and among the Parties and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

II. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Section 113(b) of the Act, 42 U.S.C. § 7413(b), and over the Parties. Venue lies in this District pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b), and 28 U.S.C. §§ 1391(b) and 1395(a), because many of the violations alleged in the Complaint are alleged to have occurred in, and some of the Defendants conduct business in, this

judicial district. For purposes of this Decree, or any action to enforce this Decree, the Defendants consent to this Court's jurisdiction to enter and enforce this Decree and also consent to venue in this judicial district.

2. For purposes of this Consent Decree, each Defendant agrees that the Complaint states claims upon which relief may be granted pursuant to Sections 110, 111, 112, 113, and 502 of the Act, 42 U.S.C. §§ 7410, 7411, 7412, 7413, and 7661a.

3. Notice of the commencement of this action has been given to the States of Indiana and Ohio, as required by Section 113 of the Act, 42 U.S.C. § 7413.

III. APPLICABILITY

4. The obligations of this Consent Decree apply to and are binding upon the United States and the State Parties, and upon each Defendant as specifically provided herein and any successors, assigns, or other entities or persons otherwise bound by law.

5. No transfer of ownership or operation of a facility subject to this Consent Decree, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve the transferring Defendant of its obligation(s) to ensure that the terms of the Decree are implemented, unless (1) the transferee agrees to undertake the obligations required by Section VI (Compliance Requirements) of this Decree and to be substituted for the transferring Defendant as a Party under the Decree and thus be bound by the terms thereof, and (2) the United States and the affected State Parties consent to relieve the transferring Defendant of its obligations. The United States' or any affected State Party's decision to refuse to approve the substitution of the transferee for the transferring Defendant shall not be subject to judicial review. At least 30 days prior to such transfer, the transferring Defendant(s) shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written agreement, to EPA Region 5, the United

States Attorney for the Northern District of Indiana, and the United States Department of Justice ("DOJ"), in accordance with Section XV (Notices). Any attempt to transfer ownership or operation of a facility without complying with this Paragraph constitutes a violation of this Decree.

6. Each Defendant shall provide a copy of this Consent Decree to all officers and management-level employees, whose duties might reasonably include compliance with any provision of this Decree, as well as to any contractor retained to perform work required under this Consent Decree. Each Defendant shall condition any such contract upon performance of the work in conformity with the terms of this Consent Decree.

7. In any action to enforce this Consent Decree, no Defendant shall raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

IV. DEFINITIONS

8. Terms used in this Consent Decree that are defined in the Act or in regulations promulgated pursuant to the Act shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

a. "ArcelorMittal Burns Harbor LLC" or "ArcelorMittal Burns Harbor" shall mean defendant ArcelorMittal Burns Harbor LLC, a Delaware limited liability company, that owns and operates the Burns Harbor Facility;

b. "ArcelorMittal Cleveland LLC" or "ArcelorMittal Cleveland" shall mean defendant ArcelorMittal Cleveland LLC, a Delaware limited liability company, that owns and operates the Cleveland Facility;

c. "ArcelorMittal Indiana Harbor LLC" shall mean ArcelorMittal Indiana Harbor, which was a Delaware limited liability company. ArcelorMittal Indiana Harbor owned and operated the Indiana Harbor West Facility, and on December 31, 2017, was merged into ArcelorMittal USA LLC;

d. "ArcelorMittal USA LLC" shall mean defendant ArcelorMittal USA LLC, a Delaware limited liability company, that by virtue of the merger with ArcelorMittal Indiana Harbor LLC, owns and operates the Indiana Harbor East Facility and the Indiana Harbor West Facility;

e. "Burns Harbor Facility" shall mean the steel facility owned and operated by ArcelorMittal Burns Harbor located at 250 West U.S. Highway 12, Burns Harbor, Indiana;

f. "Cleveland Facility" shall mean the steel facility owned and operated by ArcelorMittal Cleveland located at 3060 Eggers Avenue, Cleveland, Ohio;

g. "Complaint" shall mean the complaint filed by the United States and the State Parties in this action;

h. "Consent Decree" or "Decree" shall mean this Decree and all appendices attached hereto (listed in Section XXII);

i. "Date of Lodging of this Consent Decree" shall mean the date that the United States files a "Notice of Lodging" of this Consent Decree with the Clerk of this Court;

j. "Day" or "day" shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day;

k. "Defendant" or "Defendants" shall mean collectively or individually as the case may be, ArcelorMittal Burns Harbor LLC, ArcelorMittal Cleveland LLC, and ArcelorMittal USA LLC;

l. "Dirty Gas Bleeder Valve" or "DGBV" means a device at the top of the furnace that, when open, relieves blast furnace internal pressure to the ambient air. The Dirty Gas Bleeder Valve can operate as a self-actuating safety device to relieve excess pressure and as an operator initiated process control instrument;

m. "Dirty Gas Bleeder Valve Opening" means any opening of the Dirty Gas Bleeder Valve which allows gas and/or particulate matter to flow past the sealing seat. For purposes of this Consent Decree, any multiple openings and closings of a Dirty Gas Bleeder Valve that occur within a 30-minute period shall be considered to constitute a single Dirty Gas Bleeder Valve Opening;

n. "Dirty Gas Bleeder Valve Planned Opening" or "DGBV Planned Opening" means a DGBV Opening that is initiated by an operator as part of a furnace startup, shutdown, or temporary idling for maintenance action;

o. "Dirty Gas Bleeder Valve Unplanned Opening" or "DGBV Unplanned Opening" means a Dirty Gas Bleeder Valve Opening that is not a DGBV Planned Opening;

p. "Effective Date" shall have the definition provided in Section XVI;

q. "EPA" shall mean the United States Environmental Protection Agency and any of its successor departments or agencies;

r. "Facilities" shall mean collectively, the Burns Harbor Facility, the Cleveland Facility, the Indiana Harbor East Facility, and the Indiana Harbor West Facility;

s. "40% 6-Minute Average Opacity Standard" shall mean the opacity standard set forth in Section C.2 of IDEM Part 70 Operating Permit No. T127-31788 for the Burns Harbor Facility;

t. "IDEM" shall mean the Indiana Department of Environmental Management;

u. "Indiana Harbor East Facility" or the "IHE Facility" shall mean the steel facility owned and operated by ArcelorMittal USA, located at 3210 Watling Street, East Chicago, Indiana;

v. "Indiana Harbor West Facility" or the "IHW Facility" shall mean the steel facility owned and operated by ArcelorMittal USA, located at 3001 Dickey Road, East Chicago, Indiana;

w. "Non-Title V Permit" shall mean any construction permit issued by a state pursuant to a program approved under Title I of the Clean Air Act;

x. "Ohio EPA" shall mean the Ohio Environmental Protection Agency.

y. "Paragraph" shall mean a portion of this Decree identified by an Arabic numeral;

z. "Parties" shall mean the United States, the States of Indiana and Ohio, and Defendants;

aa. "Plaintiffs" shall mean the United States and the States of Indiana and Ohio;

bb. "Section" shall mean a portion of this Decree identified by a roman numeral;

cc. "States" and "State Parties" shall mean the State of Indiana and the State of Ohio; and

dd. "United States" shall mean the United States of America, acting on behalf of EPA.

V. CIVIL PENALTY

9. ArcelorMittal USA, ArcelorMittal Burns Harbor, and ArcelorMittal Cleveland, shall pay a total aggregate civil penalty of $5,002,158, together with interest accruing from the date of lodging at the rate specified in 28 U.S.C. § 1961 as of the date of lodging.

10. Within 30 days after the Effective Date of this Consent Decree, of the total civil penalty specified in Paragraph 9, $2,594,829 shall be paid to the United States; $2,035,469.50 shall be paid to the State of Indiana; and $371,859.50 shall be paid to the State of Ohio, in the manner outlined in Paragraph 11 below.

11. Civil Penalty Payment:

a. Defendants shall pay the civil penalties due to the United States at https://www.pay.gov to the U.S. Department of Justice account, in accordance with instructions provided to the ArcelorMittal USA at the addresses set forth in Section XV (Notices) by the Financial Litigation Unit ("FLU") of the United States Attorney's Office for the Northern District of Indiana, Hammond Division after the Effective Date. The payment instructions provided by the FLU shall include a Consolidated Debt Collection System ("CDCS") number, which each Defendant shall use to identify all payments required to be made in accordance with this Consent Decree. The FLU will provide the payment instructions to: Treasurer, Treasury, 1 S. Dearborn Street, 19th Floor, Chicago, Illinois, 60603, (312) 899-3927, on behalf of the Defendants. ArcelorMittal USA may change the individual to receive payment instructions on their behalf by providing written notice of such change to the United States and EPA in

accordance with Section XV (Notices). At the time of payment, ArcelorMittal USA shall send notice that payment has been made: (i) to EPA via email at acctsreceivable.cinwd@epa.gov or via regular mail at EPA Cincinnati Finance Office, 26 Martin Luther King Drive, Cincinnati, Ohio 45268; (ii) to the United States via email or regular mail in accordance with Section XV (Notices); and (iii) to EPA in accordance with Section XV (Notices). Such notice shall reference the CDCS Number and DOJ case number 90-5-2-1-09354;

b. Payment of the civil penalties and of any stipulated penalties owed to the State of Indiana shall be made by wire transfer or check to the Environmental Management Special Fund. Checks shall include the Case Number and shall be mailed to the Office of Legal Counsel, IGCN, Rm N. 1307, 100 N. Senate Avenue, Indianapolis, IN 46204-2251; and

c. Payment of the civil penalties and of any stipulated penalties owed to the State of Ohio shall be made by delivering or mailing to the Ohio Attorney General's Office, Environmental Enforcement Section, c/o Sandra Finan or her successor, Paralegal, 30 East Broad Street, 25th Floor, Columbus, Ohio 43215, a check for the appropriate amount, payable to the order of the "Treasurer, State of Ohio."

d. Defendants shall not deduct any penalties paid under this Decree pursuant to this Section or Section IX (Stipulated Penalties) in calculating its federal or State or local income tax.

12. For purposes of the identification requirement of Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. §162(f)(2)(A)(ii), performance of Section III (Applicability), Paragraph 6; Section VI (Compliance Requirements) Paragraphs 13-16, 17a, 18; Section VIII (Reporting Requirements), Paragraphs 20-21, 23-24; and Section XII (Information Collection and Retention), Paragraphs 56-59, is restitution or required to come into compliance with law.

VI. COMPLIANCE REQUIREMENTS

13. Indiana Harbor East Facility

a. Within six months after the Effective Date of the Consent Decree, ArcelorMittal USA shall submit a permit modification application to withdraw the EAF from the applicable Title V permit.

b. No. 7 Blast Furnace SO_2 Casthouse Baghouse and Canopy Baghouse Emissions Compliance Plan ("Compliance Plan"). A permanent and enforceable SO_2 mass emission rate for the No. 7 Blast Furnace casthouse baghouse and canopy baghouse at the Indiana Harbor East Facility is required to ensure attainment of the one hour SO_2 National Ambient Air Quality Standard in the area surrounding the Indiana Harbor East Facility. The Compliance Plan and requirements specified in this section will ensure that SO_2 emissions compliance is addressed and that the Interim SO_2 Emissions Limits defined in Paragraph 13(b)(1) and Final SO_2 Emissions Limits defined in Paragraph 13(b)(2) are enforceable by the State of Indiana and the United States.

(1) No. 7 Blast Furnace Casthouse Baghouse and Canopy Baghouse Interim SO_2 Emissions Limit. Beginning on the Effective Date of this Consent Decree, ArcelorMittal USA shall comply with the following combined SO_2 interim emissions limitation for the No. 7 Blast Furnace casthouse baghouse and canopy baghouse ("Interim SO_2 Emissions Limit"): No. 7 Blast Furnace casthouse baghouse and canopy baghouse: 432 lbs/hr combined total.

(2) No. 7 Blast Furnace Casthouse Baghouse and Canopy Baghouse Final SO_2 Emissions Limit. Within 30 days after the Effective Date of this Consent Decree, ArcelorMittal USA shall request the State of Indiana to revise the Lake County Indiana SO_2 SIP to modify the SO_2 Emissions Limits for the No. 7 Blast Furnace casthouse baghouse and canopy baghouse ("Final SO_2 Emissions Limits"). The Indiana SIP process for revision of the Lake County SIP regulations at 326 IAC 7-4.1-11 shall apply for establishing Final SO_2 Emissions Limits for the No. 7 Blast Furnace casthouse baghouse and canopy baghouse.

(3) Within 120 days of the Effective Date of this Consent Decree, ArcelorMittal USA shall demonstrate compliance with the Interim SO_2 Emissions Limit by performing stack testing on the No. 7 Blast Furnace

casthouse baghouse and canopy baghouse. In accordance with Paragraph 13.b.(6), ArcelorMittal USA shall demonstrate continuing compliance with the Interim SO_2 Emissions Limit by repeating the stack testing required in this Paragraph once each calendar year following the completion of the first stack test required in this Paragraph. The stack testing required by this Paragraph shall continue until the later of 1) the date of the time for filing any judicial or administrative petition for review or appeal of the EPA final approval of the revised Lake County Indiana SO_2 State Implementation Plan requested in Paragraph 13.b.(2) and as published in the Federal Register expires, or 2) the date upon which any judicial and administrative actions have been finally resolved (collectively, "the Final Resolution Date").

(4) Within six months of the Final Resolution Date, ArcelorMittal USA shall perform stack testing on the No. 7 Blast Furnace casthouse baghouse and canopy baghouse to demonstrate initial compliance with the Final SO_2 Emissions Limits. ArcelorMittal USA shall demonstrate continuous compliance with the Final SO_2 Emissions Limits in accordance with the requirements in Paragraph 13.b.(7). This Paragraph shall have no force and effect if ArcelorMittal USA determines that the installation of SO_2 control technology is required as specified in Paragraph 13.b.(8).

(5) If installation of control technology is required under Paragraph 13.b.(8)., then within 18 months of the Final Resolution Date, ArcelorMittal USA shall perform stack testing on the No. 7 Blast Furnace casthouse baghouse and canopy baghouse to demonstrate initial compliance with the Final SO_2 Emissions Limits. Defendant ArcelorMittal USA shall demonstrate continuous compliance with the Final SO_2 Emissions Limits in accordance with the requirements in Paragraph 13.b.(7).

(6) SO_2 Compliance Testing Methodology: At least 60 days prior to the compliance testing required in Paragraph 13.b.(3) and (4) of this Consent Decree, ArcelorMittal USA shall submit a stack test protocol to EPA for review and approval. The testing protocol will follow all existing performance testing requirements pursuant to 40 C.F.R. Part 60, Appendix A, Methods 1– 4, for flow 6, 6A, or 6C for SO_2 concentration, and in accordance with 326 IAC 3-6. Testing conditions will include simultaneous testing of the No. 7 Blast Furnace casthouse baghouse and canopy baghouse stacks (and all new casthouse control discharge stacks servicing the No. 7 Blast Furnace) for purposes of demonstrating compliance with the combined casthouse baghouse and canopy baghouse Interim SO_2 Emissions Limit and Final SO_2 Emissions Limits established under Paragraph 13.b.(1) and (2) of this Consent Decree. For the sole purpose of reporting as required by Title V Permit No. TO89-29993-00316, ArcelorMittal USA shall determine an SO_2 per ton of hot metal (lbs/ton) emission factor, based upon the sum of all the SO_2 mass emissions from all casthouse control device discharge stacks during each individual test runs, divided by the total hot metal production weights for the iron pugh ladles filled during that test run.

(7) Continuous Compliance Requirements for Final SO_2 Emissions Limits.

(i) ArcelorMittal USA shall demonstrate continuous compliance with the Final SO_2 Emissions Limits as a daily (24-hour) average SO_2 lbs/hr emission limit by following the methodology set forth in Title V Permit No. TO89-29993-00316, Section D.2.16 and 326 IAC 7.4.1-11(b)(1), using the SO_2 lbs/ton emission factor established under Paragraph 13.b.(6) multiplied by the daily No. 7 Blast Furnace hot metal production and divided by 24 hrs/day to calculate daily SO_2 lbs/hr emissions for the No. 7 Blast Furnace casthouse baghouse and canopy baghouse stacks.

(ii) ArcelorMittal USA will validate the SO_2 lbs./ton emission factor described in Paragraph 13.b.(6) above, with periodic stack testing every 2.5 years following the same stack testing methodology as the initial compliance demonstration.

(8) Installation of SO_2 Control Technology. If ArcelorMittal USA determines that the installation of SO_2 control technology is required to achieve compliance with the Final SO_2 Emissions Limits, within 30 days of the Final Resolution Date, ArcelorMittal USA shall submit to EPA for approval an engineering report describing such technology, and a plan and schedule to complete installation and start-up of appropriate controls. ArcelorMittal USA will follow the testing methodology outlined in Paragraph 13.b.(6) to demonstrate compliance with the Final SO_2 Emissions Limits.

14. Indiana Harbor West Facility

a. At the Indiana Harbor West facility, ArcelorMittal USA shall demonstrate compliance with the 20%, 6-min average opacity requirements set forth in its Title V permit T089-27587-00318 Condition C.1(a). and the Iron and Steel NESHAP, Tables 1 and 3. ArcelorMittal USA shall hire a third-party contractor(s) to measure the opacity of visible emissions from the Nos. 3 and 4 Blast Furnace casthouse roof monitors by conducting readings in accordance with Reference Method 9, contained in Appendix A of 40 C.F.R. Part 60 ("Method 9 readings"). The contractor(s) shall commence the Method 9 readings no later than six months following the Effective Date of this Consent Decree, read the emissions during eight casts per week at each Blast Furnace casthouse while the Blast Furnaces are operating, and continue such readings for a period of 12 weeks. ArcelorMittal USA shall submit the results of

the readings to EPA and IDEM with the applicable quarterly report required under Section VIII (Reporting Requirements).

b. Within three months of the Effective Date of the Consent Decree, ArcelorMittal USA shall submit a copy to EPA of its Standard Operating Procedures ("SOP") for the Nos. 1 and 2 BOFs in the BOF Shop.

(1) The SOP shall include the intended range of the parameters set forth in the Bender Corporation Fluid Dynamic Model established for the ArcelorMittal Indiana Harbor West facility. The operating parameters in the SOP shall be enforceable terms under this Consent Decree.

(2) If, prior to termination of the Consent Decree, ArcelorMittal USA determines that the operating parameters should be revised, then ArcelorMittal USA shall notify EPA and perform a demonstration to determine whether operation of the Nos. 1 and 2 BOFs in accordance with the revised operating parameters will achieve compliance with the 20%, 3-minute average opacity requirements in Condition D.3(c) and the Iron and Steel NESHAP, Tables 1 and 3 of the Title V permit T089-27587-00318.

(3) If ArcelorMittal USA demonstrates compliance with the 20%, 3-minute average opacity requirements in Condition D.3.4(c) and the Iron and Steel NESHAP, Tables 1 and 3 of the Title V permit using new operating parameters, then it shall update the SOP and submit it to EPA.

c. Beginning within six months of the Effective Date of this Consent Decree, for 26 weeks, ArcelorMittal USA shall perform one heat audit per week at the BOF Shop while the BOFs are operating. ArcelorMittal USA shall include the results of the audits in its quarterly submission required under Section VIII (Reporting Requirements).

d. Beginning within six months of the Effective Date of the Consent Decree, for 26 weeks ArcelorMittal USA shall have a third-party contractor conduct Method 9 readings at the BOF Shop roof monitor for four heats per week while the furnaces are operating. ArcelorMittal USA shall submit the results of the readings to EPA and IDEM with the applicable quarterly report required under Section VIII (Reporting Requirements).

e. Beginning within six months of the Effective Date of the Consent Decree, for 26 weeks ArcelorMittal USA shall perform one cast audit per week at each of the Nos. 3 and 4 Blast Furnaces while the Blast Furnaces are operating. ArcelorMittal USA shall include the results of the cast audits in its quarterly submission required under Section VIII (Reporting Requirements).

f. Within three months of the Effective Date of the Consent Decree, ArcelorMittal USA shall submit a copy to EPA of its SOP for the electrostatic precipitator at the BOF Shop. The SOP shall include the parameters used to demonstrate compliance including maintenance and cleaning practices, and the cold box start-up procedure.

g. If the sinter plant is reactivated, ArcelorMittal USA shall notify IDEM and EPA of its decision to reactivate the sinter plant within 60 days of such decision and shall apply for the applicable permit(s).

15. Burns Harbor Facility

a. Within 30 days of the Effective Date of the Consent Decree, ArcelorMittal Burns Harbor shall commence and for a 26 week period thereafter perform a DGBV Planned Opening Emission Minimization Program ("Emission Minimization Program"). The purpose of the Emission Minimization Program shall be to determine the extent to which visible emissions can be minimized during DGBV Planned Openings. In performing the DGBV Emission Minimization Program, ArcelorMittal Burns Harbor shall:

(1) Record the time and duration of all DGBV Planned Openings;

(2) Record blast furnace operating parameter data during the period that ArcelorMittal Burns Harbor is preparing for a DGBV Planned Opening and during the time of the DGBV Opening itself, including identifying the bleeder that opened, and top pressure and hot blast pressure leading up to and during the opening;

(3) Identify the primary operational reason for each DGBV Planned Opening (i.e., scheduled maintenance, production adjustments, burden adjustments);

(4) Evaluate operationally acceptable ranges of top pressure and hot blast pressure such that visible emissions performance is optimized during DGBV Planned Openings without incurring adverse effects on safety and furnace operations; ArcelorMittal Burns Harbor shall determine what it deems adverse effects and operationally acceptable;

(5) Consistent with the foregoing, evaluate blast pressures at 8 psi and below;

(6) Perform Method 9 readings of all DGBV Planned Openings (regardless of duration) that occur Monday through Friday 7:00 am – 3:00 pm, excluding Holidays, when ArcelorMittal Burns Harbor knows or has reason to know that a DGBV Planned Opening will occur at least one hour in advance of the initiation of the DGBV Planned Opening;

(7) ArcelorMittal Burns Harbor shall commence the Method 9 visible emission observations upon the opening of a DGBV and continue such observations for at least ten minutes. At the end of the ten-minute period, if there are visible emissions, ArcelorMittal Burns Harbor shall continue to take the observations for at least one hour or until visible emissions are less than or equal to 20% for three continuous minutes; and

(8) If ArcelorMittal Burns Harbor does not take Method 9 visible emission observations for at least 13 planned openings during the 26 week Emissions Minimization Program, it shall extend the observation period until a minimum of 13 observations are made.

b. Within 30 days of completion of the DGBV Planned Opening Emissions Minimization Program, ArcelorMittal Burns Harbor shall submit to EPA and IDEM:

(1) A report of ArcelorMittal Burns Harbor's findings and conclusions, including, but not limited, to findings and a detailed description of process variables that could have a material impact on opacity from bleeders during a DGBV Planned Opening, including the blast pressure at which the bleeders open, the period between ceasing fuel input and opening the bleeders, and the period between opening the bleeders and isolating the stoves/blast; and a detailed description of the operationally acceptable ranges of top pressure and hot blast pressure such that visible emission performance is reduced to the greatest extent practicable. ArcelorMittal Burns Harbor shall state with specificity the basis for the lowest pressure in the operationally acceptable range and why a lower pressure is not operationally acceptable;

(2) All data required to be gathered pursuant to Paragraph 15.a. above; and

(3) If satisfactory compliance with the 40% 6-Minute Average Opacity Standard is not achieved during the 26 week period set forth in Paragraph 15.a., above, a plan for conducting a DGBV Planned Opening compliance demonstration in accordance with Paragraph 15c., below.

c. If the 40% 6-Minute Average Opacity Standard is exceeded during the 26 week period set forth in Paragraph 15.a. above, within 36 weeks of the Effective Date of the Consent Decree, ArcelorMittal Burns Harbor shall commence, and for a 26 week period thereafter, perform a DGBV Planned Opening Compliance Demonstration. The DGBV Planned Opening Compliance Demonstration shall consist of performing Method 9 readings of visible emissions from all DGBV Planned Openings that occur Monday – Friday 7:00 am – 3:00 pm, excluding Holidays, in accordance with the Emission Minimization Program details specified in Paragraph 15.a. above. During the entire 26 week DGBV Planned Opening Compliance Demonstration, ArcelorMittal Burns Harbor shall record: the time and duration of all DGBV Planned Openings; which bleeder(s) opened; top pressure and hot blast pressure; and the primary operational reason for each DGBV Planned Opening (i.e., scheduled maintenance, production adjustments, burden adjustments) that occurred during the compliance demonstration. Within 30 days of the end of the DGBV Planned Opening Compliance Demonstration period, ArcelorMittal Burns Harbor shall submit a DGBV Planned Opening Compliance Demonstration Report to EPA and IDEM that includes the information stated in this Paragraph and the results of the Method 9 readings.

d. Beginning within six months of the Effective Date of the Consent Decree, ArcelorMittal Burns Harbor shall, for 12 weeks, have a third-party contractor conduct Method 9 readings at the C and D Blast Furnace roof casthouse monitors for eight casts per week, at each blast furnace casthouse, while the blast furnaces are operating. ArcelorMittal Burns Harbor shall

submit the results of the readings to EPA and IDEM with the applicable quarterly report required under Section VIII (Reporting Requirements).

e. Within three months of the Effective Date of the Consent Decree, ArcelorMittal Burns Harbor shall submit a copy to EPA of its SOPs for the No. 1 Coke Oven Battery that includes memorializing its institutional knowledge on proper operation of the Battery during short and long periods of blast furnace gas unavailability and providing for actions to be taken if there is a stack opacity early warning alarm (currently set by ArcelorMittal Burns Harbor at 35%) to ensure compliance with all applicable visible emission limitations during such operating scenarios.

f. No later than 12 months following the Effective Date of the Consent Decree, ArcelorMittal Burns Harbor shall beach iron, when beaching is necessary, only with the use of an existing or new partial or total enclosure that will ensure that opacity outside of this enclosure complies with the applicable visible emission limits and fugitive particulate control plan requirements in the ArcelorMittal Burns Harbor Title V permit.

(1) ArcelorMittal Burns Harbor shall use a carbon dioxide gas suppression system during all beaching events with the use of the existing or new partial or total enclosures;

(2) ArcelorMittal Burns Harbor shall perform Method 9 readings during the first ten beaching events conducted with the use of the existing or new partial or total enclosure;

(3) ArcelorMittal Burns Harbor shall submit the results of the Method 9 readings to EPA and IDEM with the applicable quarterly report required under Section VIII (Reporting Requirements); and

(4) No later than 12 months following completion of the monitoring required in Paragraph 15.f.(2), ArcelorMittal Burns Harbor shall submit an application to IDEM to modify its federally-enforceable non-Title V Permit such that ArcelorMittal Burns Harbor is required to operate as specified in Paragraph 15.f.(1) to ensure compliance with applicable visible emission limits.

g. Within 12 months of the Effective Date of the Consent Decree, ArcelorMittal Burns Harbor shall commence implementation of an electronic data management program for calibrations and inspections required by Title V Permit T127-31788-0001.

h. In addition to ArcelorMittal Burns Harbor, ArcelorMittal USA shall be obligated to complete the Compliance Requirements specified in Paragraph 15.

16. Cleveland Facility

a. Beginning on the Effective Date of the Consent Decree, and for 52 weeks thereafter, if skimming without controls occurs Monday through Friday, 7:00 am – 3:00 pm, excluding Holidays, in the No.1 and No. 2 BOF Shop, within two hours, ArcelorMittal Cleveland shall perform Method 9 readings of the No. 1 and No. 2 BOF roof monitor. ArcelorMittal Cleveland shall record the number of heats, if skimming without controls occurs, Monday through Friday 3:00 pm to 7 am and between the hours of Friday 3:00 pm through Monday 7:00 am. ArcelorMittal Cleveland shall submit the results of the readings and records to EPA, Ohio EPA, and the Cleveland Division of Air Quality with the applicable quarterly report required under Section VIII (Reporting Requirements).

b. In addition to ArcelorMittal Cleveland, ArcelorMittal USA shall be obligated to complete the Compliance Requirements specified in Paragraph 16.

17. Review of Deliverables. After review of any plan, report, or other item that is required to be submitted for approval by EPA pursuant to this Consent Decree by any Defendant, EPA, after consultation with the applicable State, shall in writing: (a) approve the submission; (b) approve the submission upon specified conditions; (c) approve part of the submission and disapprove the remainder; or (d) disapprove the submission.

a. If the submission is approved pursuant to this Paragraph 17, the affected Defendant(s) shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part pursuant to Paragraph 17(b) or (c), the affected Defendant(s) shall, upon written direction from EPA, after consultation with the applicable State, take all actions required by the approved plan, report, or other item that EPA after consultation with the applicable State, determines are technically severable from any disapproved portions, subject to affected Defendant(s)' right to dispute only the specified conditions or the disapproved portions, under Section XI (Dispute Resolution).

b. If the submission is disapproved in whole or in part pursuant to Paragraph 17(c) or (d), the affected Defendant(s) shall, within 45 days or such other time as the Parties agree to in writing, correct all deficiencies and resubmit the plan, report, or other item, or disapproved portion thereof, for approval, in accordance with the preceding Paragraphs. If the resubmission is approved in whole or in part, the affected Defendant(s) shall proceed in accordance with this Paragraph 17.

c. Any stipulated penalties applicable to the original submission, as provided in Section IX (Stipulated Penalties), shall accrue during the 45 day period or other specified period, but shall not be payable unless the resubmission is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of the affected Defendant(s)' obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

d. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, EPA, after consultation with the applicable State, may again require the affected Defendant(s) to correct any deficiencies, in accordance with the preceding Paragraphs, subject to Defendant(s)' right to invoke Dispute Resolution and the right of EPA and the State Party to seek stipulated penalties as provided in the preceding Paragraph.

18. Permits. Where any compliance obligation under this Consent Decree requires one or more Defendant to obtain a federal, state, or local permit or approval, the affected Defendant(s) shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. The affected Defendant(s) may seek relief under the provisions of Section X (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if the affected Defendant(s) submitted timely and complete applications and has taken all other actions necessary to obtain all such permits or approvals.

VII. STATE OF INDIANA SUPPLEMENTAL ENVIRONMENTAL PROJECT

19. Defendants completed a State supplemental environmental project for Indiana ("Indiana-Only SEP") as described in Appendix A.

VIII. REPORTING REQUIREMENTS

20. Each Defendant shall submit, as applicable, by electronic mail, a quarterly report for the preceding quarter to EPA, and IDEM or Ohio EPA as applicable, within 45 days after the end of each calendar quarter (i.e., by May 15, August 14, November 14, and February 14) after the Effective Date of this Consent Decree, until termination of this Decree pursuant to Section XIX (Termination), containing the following as applicable to the Defendant: the status of any construction or compliance measures necessary to meet the compliance requirements set forth in Section VI (Compliance Requirements); problems encountered or anticipated, together

with implemented or proposed solutions; status of permit applications; operation and maintenance work; any reports to State agencies. The first quarterly report following entry of the Consent Decree shall be submitted by the later of (a) the end of the month following the end of the first full half calendar year after the Effective Date, or (b) within 90 days of the Effective Date of the Consent Decree.

21. The quarterly report described in Paragraph 20 above, shall also include a description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If any Defendant(s) violates, or has reason to believe that it may violate, any requirement of this Consent Decree, the affected Defendant(s) shall notify the United States and the applicable State of such violation and its likely duration, in writing, within ten working days of the day the affected Defendant(s) first become aware of the violation, with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, the affected Defendant(s) shall so state in the report. The affected Defendant(s) shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within 30 days of the day the affected Defendant(s) become aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves any Defendant(s) of its obligation to provide the notice required by Section X (Force Majeure).

22. Whenever any violation of this Consent Decree or of any applicable permits or any other event affecting any Defendant(s)' performance under this Decree, or the performance of a facility, may pose an immediate threat to the public health or welfare or the environment, the

affected Defendant(s) shall notify EPA and the State Party orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after the affected Defendant(s) first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

23. All reports shall be submitted to the persons designated in Section XV (Notices).

24. All reports submitted by any Defendant(s) under this Section shall be signed by an official of the submitting party and include the following certification:

> I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

25. The certification requirement in Paragraph 24 does not apply to emergency or similar notifications where compliance would be impractical.

26. The reporting requirements of this Consent Decree do not relieve the Defendant(s) of any reporting obligations required by the Act or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.

27. Any information provided pursuant to this Consent Decree may be used by the United States or the affected State Party in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

IX. STIPULATED PENALTIES

28. ArcelorMittal USA, ArcelorMittal Burns Harbor, and ArcelorMittal Cleveland shall be liable for stipulated penalties to the United States and the applicable State for violations of any obligation under this Consent Decree as specified below, unless excused under Section X

(Force Majeure). A violation includes a Defendant's failure to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.

29. Late Payment of Civil Penalty. If any Defendant fails to pay the civil penalty required to be paid under Section V (Civil Penalty) when due, said Defendant shall pay a stipulated penalty of $2,000 per day for each day that the payment is late.

30. Compliance Requirements. The following stipulated penalties shall accrue per violation per day for each violation of the Compliance Requirements identified in Section VI, Paragraphs 13.b.(1)-(5), 13.b.(7), 14.a., 14.b.(1)-(3), 14.c.-f., 15.a., 15.c., 15.d., 15.e., 15.f.(1)-(2), 15.g-h., and 16.a.:

Penalty Per Violation Per Day	Period of Noncompliance
$1,500	1st through 14th day
$2,500	15th through 30th day
$3,500	31st day and beyond

Notwithstanding the penalty amounts contained in the Compliance Requirements stipulated penalty provision set forth immediately above, the following stipulated penalties shall accrue per day for violation of the 40% 6-Minute Average Opacity Standard during execution of the Compliance Requirements identified in Paragraphs 15.a.(6). and c.:

Penalty Per 6-Minute Average Opacity Violation	Period of Noncompliance
$750 day	1-5 occurrences/day
$1500 day	6-10 occurrences/day
$3,500 day	11+ occurrences/day

31. Notification Requirements. The following stipulated penalties shall accrue per violation per day for each violation of the Notification requirements identified in Paragraphs 14.b.(2), 14.g and Paragraph 22:

Penalty Per Violation Per Day	Period of Noncompliance
$1,500	1st through 14th day
$2,000	15th through 30th day
$3,000	31st day and beyond

32. Permitting Requirements. The following stipulated penalties shall accrue per violation per day for each violation of the Permitting requirements identified in Paragraphs 13.a., 13.b.(2) and. 14.g.:

Penalty Per Violation Per Day	Period of Noncompliance
$1,500	1st through 14th day
$2,000	15th through 30th day
$2,500	31st day and beyond

33. Reporting Requirements. The following stipulated penalties shall accrue per violation per day for each violation of the reporting requirements of Section VII (Reporting) and requirements identified in Paragraphs 13.b.(6), 13.b.(8), 14.a., 14.b.(3), 14.c., 14.d., 14.e., 14.f., 15.b.(1)-(3), 15.c., 15.d., 15.e., 15.f.(3), 16.a.:

Penalty Per Violation Per Day	Period of Noncompliance
$250	1st through 14th day
$500	15th through 30th day
$1,000	31st day and beyond

34. With respect to obligations under this Consent Decree where ArcelorMittal USA and another Defendant are jointly responsible for satisfying the obligation, only one stipulated penalty may be assessed for failure to perform such obligation.

35. Stipulated penalties under this Section shall begin to accrue on the day after performance is due or on the day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

36. ArcelorMittal USA, ArcelorMittal Burns Harbor, or ArcelorMittal Cleveland shall pay stipulated penalties to the United States and the State within which the respective facility is located within 30 days of receiving a written demand by the United States or the State. ArcelorMittal USA, ArcelorMittal Burns Harbor or ArcelorMittal Cleveland shall pay 50 percent of the total stipulated penalty amount due to the United States and 50 percent to the affected State(s). The Plaintiff making a demand for payment of a stipulated penalty shall simultaneously send a copy of the demand to the other Plaintiffs.

37. Stipulated penalties shall continue to accrue as provided in Paragraph 35, during any Dispute Resolution, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of EPA and/or the applicable State that is not appealed to the Court, ArcelorMittal USA, ArcelorMittal Burns Harbor, or ArcelorMittal Cleveland shall pay accrued penalties determined to be owing, together with interest, to the United States and the State within 30 days of the effective date of the agreement or the receipt of EPA's or the State's decision or order.

b. If the dispute is appealed to the Court and the United States and/or the applicable State prevails in whole or in part, ArcelorMittal USA, ArcelorMittal Burns Harbor, or

ArcelorMittal Cleveland shall pay all accrued penalties determined by the Court to be owing, together with interest, within 60 days of receiving the Court's decision or order, except as provided in subparagraph c, below.

c. If any Party appeals the District Court's decision, ArcelorMittal USA, ArcelorMittal Burns Harbor, or ArcelorMittal Cleveland shall pay all accrued penalties determined to be owing, together with interest, within 15 days of receiving the final appellate court decision.

38. ArcelorMittal USA, ArcelorMittal Burns Harbor or ArcelorMittal Cleveland shall pay stipulated penalties owing to the United States and/or the States in the manner set forth and with the confirmation notices required by Paragraph 11, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violations the penalties are being paid.

39. If ArcelorMittal USA, ArcelorMittal Burns Harbor or ArcelorMittal Cleveland, fail to pay stipulated penalties according to the terms of this Consent Decree, that Defendant shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States and/or the State Party from seeking any remedy otherwise provided by law for a Defendant's failure to pay any stipulated penalties.

40. Subject to the provisions of Section XIII (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States and/or the affected States (including, but not limited to, statutory penalties, additional injunctive relief, mitigation or offset measures, and/or contempt) for a Defendant(s)' violation of this Consent Decree or applicable

law. Where a violation of this Consent Decree is also a violation of the NESHAP Requirements, the NSPS Requirements, the SIP Requirements and/or the Title V Requirements, the affected Defendant(s) shall be allowed a credit, for any stipulated penalties paid, against any statutory penalties imposed for such violation.

41. The United States and/or each State Party may, in the unreviewable exercise of their discretion, reduce or waive Stipulated Penalties otherwise due that Plaintiff under this Consent Decree. The determination by one Plaintiff not to seek Stipulated Penalties, or subsequently to waive or reduce the amount it seeks, shall not preclude the other Plaintiffs from seeking the full amount of Stipulated Penalties owing to that Plaintiff.

X. FORCE MAJEURE

42. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of any Defendant(s), of any entity controlled by any of the Defendant(s), or of any Defendant(s)' contractor, which delays or prevents the performance of any obligation under this Consent Decree despite the affected Defendant(s)' best efforts to fulfill the obligation. The requirement that the Defendant(s) exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any such event (a) as it is occurring and (b) after it has occurred to prevent or minimize any resulting delay to the greatest extent possible. "Force Majeure" does not include a Defendant's financial inability to perform any obligation under this Consent Decree.

43. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, the affected Defendant(s) shall provide notice orally or by electronic or facsimile transmission to the United States, the applicable EPA Regional office, and the relevant State Party, within 72 hours

of when the affected Defendant(s) first knew that the event might cause a delay. Within seven days thereafter, the affected Defendant(s) shall provide in writing to EPA and the State Party an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; the affected Defendant(s)' rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of the affected Defendant(s), such event may cause or contribute to an endangerment to public health, welfare or the environment. The affected Defendant(s) shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude the affected Defendant(s) from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. The affected Defendant(s) shall be deemed to know of any circumstance of which the affected Defendant(s), any entity controlled by the affected Defendant(s), or the affected Defendant(s)' contractors knew or should have known.

44. If EPA, after a reasonable opportunity for review and comment by the relevant State, agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA, after a reasonable opportunity for review and comment by the applicable State, for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. EPA will notify the

affected Defendant(s) in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

45. If EPA, after a reasonable opportunity for review and comment by the relevant State, does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify the affected Defendant(s) in writing of its decision.

46. If the affected Defendant(s) elect to invoke the dispute resolution procedures set forth in Section XI (Dispute Resolution), the affected Defendant(s) shall do so no later than 15 days after receipt of EPA's notice. In any such proceeding, the affected Defendant(s) shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that the affected Defendant(s) complied with the requirements of Paragraphs 42 and 43. If the affected Defendant(s) carry this burden, the delay at issue shall be deemed not to be a violation by the affected Defendant(s) of the affected obligation of this Consent Decree identified to EPA and the Court.

XI. DISPUTE RESOLUTION

47. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. A Defendant(s)' failure to seek resolution of a dispute under this Section shall preclude the affected Defendant(s) from raising any such issue as a defense to an action by the United States or a State Party to enforce any obligation of the affected Defendant(s) arising under this Decree.

48. Informal Dispute Resolution. Any dispute subject to dispute resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be

considered to have arisen when a Defendant(s) sends the United States and the relevant State Party a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 20 days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States, after consultation with the affected State Party, shall be considered binding unless, within 30 days after the conclusion of the informal negotiation period, the affected Defendant(s) invoke formal dispute resolution procedures as set forth below.

49. Formal Dispute Resolution. The affected Defendant(s) shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States and the affected State Party a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting the affected Defendant(s)' position and any supporting documentation relied upon by the affected Defendant(s).

50. The United States and the affected State Party shall serve its Statement of Position(s) within 45 days of receipt of the affected Defendant(s)' Statement of Position. The United States' and/or the relevant State Party's Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' or the relevant State Party's Statement of Position shall be binding on the affected Defendant(s), unless the affected Defendant(s) file a motion for judicial review of the dispute within ten days of receipt of the United States' or the relevant State Party's Statement of Position in accordance with the

following Paragraph. In the case of a conflict between the Position of the United States and the relevant State, the position of the United States shall control.

51. The affected Defendant(s) may seek judicial review of the dispute by filing with the Court and serving on the United States and/or the relevant State Party, in accordance with Section XV (Notices), a motion requesting judicial resolution of the dispute. The motion shall contain a written statement of the affected Defendant(s)' position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

52. The United States or the relevant State Party shall respond to the affected Defendant(s)' motion within the time period allowed by the Local Rules of this Court. The affected Defendant(s) may file a reply memorandum, to the extent permitted by the Local Rules.

53. If the United States and the relevant State Party are unable to reach agreement amongst themselves with regard to the affected Defendant(s)' claim, the position of the United States shall be the Plaintiffs' final position. A dissenting State Party may file such other pleadings expressing its position as allowed by the Court.

54. Standard of Review

a. Disputes Concerning Matters Accorded Record Review. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 49 pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules or any other items requiring approval by EPA under this Consent Decree; the adequacy of the performance of work undertaken pursuant to this Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law,

the affected Defendant(s) shall have the burden of demonstrating, based on the administrative record, that the position of the United States is arbitrary and capricious or otherwise not in accordance with law.

b. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 49, the affected Defendant(s) shall bear the burden of demonstrating that its position complies with this Consent Decree and better furthers the objectives of the Consent Decree.

55. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of the affected Defendant(s) under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 37. If the affected Defendant(s) does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section IX (Stipulated Penalties).

XII. INFORMATION COLLECTION AND RETENTION

56. The United States, the States, and their representatives, including attorneys, contractors, and consultants, shall have the right of entry into any facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:

a. monitor the progress of activities required under this Consent Decree;

b. verify any data or information submitted to the United States or the State in accordance with the terms of this Consent Decree;

c. obtain samples and, upon request, splits of any samples taken by Defendants or their representatives, contractors, or consultants;

d. obtain documentary evidence, including photographs and similar data; and

e. assess a Defendant's compliance with this Consent Decree.

57. Upon request, a Defendant shall provide EPA and the relevant State or their authorized representatives splits of any samples taken by such Defendant. Upon request, EPA and the relevant State Party shall provide the Defendant splits of any samples taken by EPA or the State.

58. Until five years after the termination of this Consent Decree as to any Defendant, such Defendant shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that relate in any manner to that Defendant's performance of its obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States or a State, the Defendant shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

59. At the conclusion of the information-retention period provided in the preceding Paragraph, each Defendant shall notify the United States and the relevant State Party at least 90 days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States or the State Party, Defendant shall deliver any such documents, records, or other information to EPA or the State. A Defendant may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If a Defendant asserts such a privilege, it shall provide the following: (a) the title of the document,

record, or information; (b) the date of the document, record, or information; (c) the name and title of each author of the document, record, or information; (d) the name and title of each addressee and recipient; (e) a description of the subject of the document, record, or information; and (f) the privilege asserted by the Defendant. However, no documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

60. A Defendant may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any information that a Defendant seeks to protect as CBI, Defendants shall follow the procedures set forth in 40 C.F.R. Part 2.

61. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States or the State Parties pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of a Defendant to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XIII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

62. This Consent Decree resolves the civil claims of the United States and the States for the violations alleged in the Complaint filed in this action through the Date of Lodging and the violations alleged in the NOVs/FOVs issued in 2011 and 2019. The NOVs/FOVS are attached as Appendices B and C.

63. The United States and the States reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 62. This Consent Decree shall not be construed to limit the rights of the United States or the States to obtain penalties or injunctive relief under the Act or implementing regulations, or under other

federal or state laws, regulations, or permit conditions, except as expressly specified in Paragraph 62.

64. In any subsequent administrative or judicial proceeding initiated by the United States or a State Party for injunctive relief, civil penalties, other appropriate relief relating to one of the facilities subject to this Decree, a Defendant shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or a State in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved as to that Defendant pursuant to Paragraph 62.

65. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Each Defendant is responsible for achieving and maintaining, at its facility, complete compliance with all applicable federal, state, and local laws, regulations, and permits; and a Defendant's compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States and the States do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that any Defendant's compliance with any aspect of this Consent Decree will result in compliance with provisions of the Act, 42 U.S.C. § 7401, et seq., or with any other provisions of federal, state, or local laws, regulations, or permits.

66. This Consent Decree does not limit or affect the rights of any Defendant or of the United States or the States against any third party, not party to this Consent Decree, nor does it limit the rights of any third party, not party to this Consent Decree, against any Defendant, except as otherwise provided by law.

67. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

XIV. COSTS

68. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States and the States shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by ArcelorMittal USA, ArcelorMittal Burns Harbor, or ArcelorMittal Cleveland.

XV. NOTICES

69. Unless otherwise specified in this Decree, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

the United States by email:	casemanagement.enrd@usdoj.gov DJ # 90-5-2-1-09354
the United States by mail:	EES Case Management Unit Environment and Natural Resources Division U.S. Department of Justice P.O. Box 7611 Washington, D.C. 20044-7611 Re: DJ # 90-5-2-1-09354
to EPA:	Cynthia A. King U.S. EPA, Region 5 C-14J 77 West Jackson Blvd. Chicago, IL 60604 Attn: Compliance Tracker, AE-17J Air Enforcement and Compliance Assurance Branch U.S. Environmental Protection Agency, Region 5 77 W. Jackson Boulevard Chicago, IL 60604

the State of Indiana:	Timothy J. Junk Deputy Attorney General Office of the Indiana Attorney General Environmental Litigation Division Indiana Government Center South – Fifth Floor 302 West Washington Street Indianapolis, IN 46204 Chief, Air Compliance and Enforcement Branch Indiana Department of Environmental Management MC 61-53, IGCN 1003 100 North Senate Avenue Indianapolis, IN 46204-2251 Office of Legal Counsel Indiana Department of Environmental Management IGCN, Room 1307 100 North Senate Avenue Indianapolis, IN 46204
to the State of Ohio:	Ohio Environmental Protection Agency Division of Air Pollution Control, Central Office 50 W. Town Street Suite 700 Columbus, OH 43216-1049 Attention: Jim Kavalec Ohio Attorney General's Office Environmental Enforcement Section Toledo Regional Office One Government Center, Suite 1340 Toledo, OH 43603 Attention: Wednesday Szollosi Cleveland Department of Public Health Division of Air Quality 75 Erieview Plaza, 2nd Floor Cleveland, OH 44114 Attention: Valencia White

As to each and all the Defendants: (with a copy to the company owning and operating the specific Facility involved, as set forth below)	General Counsel ArcelorMittal USA LLC Law Department 1 South Dearborn Street, 19th Floor Chicago, IL 60603 Director, Environmental Affairs & Real Estate ArcelorMittal USA LLC 4020 Kinross Lakes Parkway Richfield, OH 44286 Dale E. Papajcik, Esq Squire Patton Boggs (US) LLP 4900 Key Tower 127 Public Square Cleveland, OH 44114
As to the Indiana Harbor East or West Facility:	General Manager ArcelorMittal USA LLC (IHE) 3210 Watling Street East Chicago, IN 46312
As to the Burns Harbor Facility:	General Manager ArcelorMittal Burns Harbor 250 W. U.S. Highway 12 Burns Harbor, IN 46304-9745
As to the Cleveland Facility:	General Manager ArcelorMittal Cleveland 3060 Eggers Avenue Cleveland, OH 44105

70. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

71. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

XVI. EFFECTIVE DATE

72. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket.

XVII. RETENTION OF JURISDICTION

73. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections XI (Dispute Resolution) and Section XVIII (Modification) or effectuating or enforcing compliance with the terms of this Decree.

XVIII. MODIFICATION

74. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court.

75. Any disputes concerning modification of this Decree shall be resolved pursuant to Section XI (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 54, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

XIX. TERMINATION

76. After a Defendant has completed the requirements set forth in Section VI (Compliance Requirements), has thereafter maintained satisfactory compliance with this Consent Decree for a period of one year, and either said Defendant (or ArcelorMittal USA) has paid the civil penalty as to the affected facility and any accrued stipulated penalties as required by this

Consent Decree applicable to the Defendant seeking termination, then that Defendant may serve upon the United States and the affected State a request for termination stating that said Defendant has satisfied those requirements, together with all necessary supporting information.

77. If a Defendant has satisfied the requirements above, except for the receipt of a permit, then after applying for such permit, the Defendant may serve on the United States a request for partial termination of the Consent Decree stating that the Defendant has satisfied those requirements, together with all necessary supporting information.

78. Following receipt by the United States and the States of a Defendant's request for termination or partial termination as set forth in Paragraph 77, above, the United States and the Defendant shall confer informally concerning the request and any disagreement that the United States and the Defendant may have as to whether the Defendant has satisfactorily complied with the requirements for termination or partial termination of this Consent Decree. If the United States, after consultation with the affected State, agree that the Decree may be partially or fully terminated, the United States and the Defendant shall submit, for the Court's approval, a joint stipulation partially or fully terminating the Decree.

79. If the United States, after consultation with the States, does not agree that the Decree may be partially or fully terminated, the Defendant may invoke Dispute Resolution under Section XI (Dispute Resolution). However, the Defendant shall not seek Dispute Resolution of any dispute regarding termination until 90 days after service of its Request for Termination.

XX. PUBLIC PARTICIPATION

80. This Consent Decree shall be lodged with the Court for a period of not less than 30 days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate,

improper, or inadequate. Each Defendant consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified the Defendants in writing that it no longer supports entry of the Decree.

XXI. SIGNATORIES/SERVICE

81. Each undersigned representative of the Defendants, States, and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

82. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Each Defendant agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXII. APPENDICES

83. The following Appendices are attached to and incorporated into this Consent Decree:

Appendix A - State of Indiana Supplemental Environmental Project description

Appendix B - 2011 NOVs/FOVs

Appendix C - 2019 NOVs/FOVS

84. If there is any inconsistency between an Appendix and the terms of this Consent Decree, the Consent Decree terms shall control.

XXIII. INTEGRATION

85. This Consent Decree, including all Appendices, constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. No other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, nor shall it be used in construing the terms of this Decree.

XXIV. FINAL JUDGMENT

86. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States, the States, and the Defendants. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

Dated and entered this day of _April 1, 2020,

s/Theresa L Sprngmann, Chief Judge

UNITED STATES DISTRICT JUDGE

Signature Page for *United States v. ArcelorMittal USA LLC, et al., (N.D. Indiana)* Consent Decree

FOR THE UNITED STATES OF AMERICA:

May 13, 2019
Date

KAREN DWORKIN
Deputy Chief
Environment and Natural Resources Division
U.S. Department of Justice

JEFFREY SPECTOR
Senior Attorney
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Washington, DC 20044-7611

THOMAS L. KIRSCH II
United States Attorney
Northern District of Indiana

WAYNE AULT
Assistant United States Attorney
Northern District of Indiana

Signature Page for *United States v. ArcelorMittal USA LLC, et al., (N.D. Indiana)* Consent Decree

FOR THE UNITED STATES OF AMERICA:

Date

KAREN DWORKIN
Deputy Chief
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United States Attorney
Northern District of Indiana

Wayne F. Ault

WAYNE AULT
Assistant United States Attorney
Northern District of Indiana

Signature Page *for United States v. ArcelorMittal USA LLC*, et al., (N.D. Indiana) Consent Decree

FOR THE U.S. ENVIROMENTAL PROTECTION AGENCY

4/2/2019
Date

T. LEVERETT NELSON
Regional Counsel
U.S. Environmental Protection Agency, Region 5

CYNTHIA A. KING
Office of Regional Counsel
U.S. Environmental Protection Agency, Region 5

Signature Page *for United States v. ArcelorMittal USA LLC, et al.*, (N.D. Indiana) Consent Decree

FOR PLAINTIFF STATE OF INDIANA

CURTIS HILL
Attorney General of Indiana

January 24, 2019
Date

PATRICIA ORLOFF ERDMANN
Chief Counsel for Litigation
Office of the Indiana Attorney General
Indiana Government Center South, Fifth Floor
320 W. Washington Street
Indianapolis, IN 46204

12/28/18
Date

BRUNO L. PIGOTT
Commissioner
Indiana Department of Environmental Management

Signature Page for *United States v. ArcelorMittal USA LLC, et al.*, (N.D. Indiana) Consent Decree

FOR PLAINTIFF THE STATE OF OHIO

DAVE YOST
OHIO ATTORNEY GENERAL

3/19/2019
Date

REID T. CARYER (IN Bar 26017-17)
Assistant Attorney General
30 E. Broad Street, 16th Floor
Columbus, Ohio 43215
Telephone: (614) 644-7250
Facsimile: (614) 644-7634
reid.caryer@ohioattorneygeneral.gov

WEDNESDAY M. SZOLLOSI (OH Bar 0075655)
Assistant Attorney General
Environmental Enforcement Section
Toledo Regional Office
One Government Center, Suite 1340
Toledo, OH 43604
Telephone: (419) 245-2550
Facsimile: (877) 626-9316
wednesday.szollosi@ohioattorneygeneral.gov

Signature Page for *United States v. ArcelorMittal USA LLC, et al.*, (N.D. Indiana) Consent Decree

FOR DEFENDANTS

ArcelorMittal USA

Jan 28, 2019
Date

By: [signature]
Its:

ArcelorMittal Burns Harbor LLC

_____
Date

By: _____
Its:

ArcelorMittal Cleveland LLC

_____
Date

By: _____
Its:

Signature Page for *United States v. ArcelorMittal USA LLC, et al.*, (N.D. Indiana) Consent Decree

FOR DEFENDANTS

ArcelorMittal USA

_____
Date

By: _____
Its:

ArcelorMittal Burns Harbor LLC

1/28/2019
Date

By: [signature]
Its: VP/GM Burns Harbor

ArcelorMittal Cleveland LLC

_____
Date

By: _____
Its:

Signature Page for *United States v. ArcelorMittal USA LLC, et al.*, (N.D. Indiana) Consent Decree

FOR DEFENDANTS

ArcelorMittal USA

_____
Date

By: _____
Its:

ArcelorMittal Burns Harbor LLC

_____
Date

By: _____
Its:

ArcelorMittal Cleveland LLC

1-28-19
Date

By: Michael Modar
Its:

APPENDIX A

APPENDIX A

Indiana-Only Supplemental Environmental Project ("SEP) Description

ArcelorMittal USA LLC (ArcelorMittal) completed a SEP in which ArcelorMittal transferred approximately five acres of natural Lake Michigan beachfront property that includes 1,099 feet of shoreline, with a third-party appraised value of $350,000, to the City of East Chicago, Indiana for a use that has environmentally beneficial effects on the local community and environment.

The property is located on the southern shore of Lake Michigan just southeast of the ArcelorMittal Indiana Harbor East facility, and adjacent to Jeorse Park (which is less than one acre in size). The property was zoned M-3, Heavy Industrial District, and the property transfer will prevent future industrial development on the site, which is beneficial to the environment and the community. This donation preserved Lake Michigan beach and open space in East Chicago for the benefit of local residents.

The property is immeasurably valuable as it is the only remaining undeveloped land that can provide additional substantial Lake Michigan beach access to Jeorse Park for the citizens of East Chicago and Gary, Indiana. The public health benefits of accessible, open and natural space to urban residents is well documented and the subject property transfer and access development will deliver such benefits.

The property transfer to the City of East Chicago was completed on September 30, 2016, and the SEP has been completed in its entirety.

APPENDIX B

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

OCT 2 1 2016

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Rob Maciel
Environmental Manager
ArcelorMittal Burns Harbor, LLC
250 West U.S. Highway 12
Burns Harbor, Indiana 46304

Dear Mr. Maciel:

This is to advise you that the United States Environmental Protection Agency (EPA) has determined that the ArcelorMittal Burns Harbor, LLC facility located at 250 West U.S. Highway 12, Burns Harbor, Indiana (Burns Harbor Facility) is in violation of the Clean Air Act (the CAA) and associated state pollution control requirements.

The EPA is sending this Notice of Violation and Finding of Violation (NOV/FOV) to notify you that at the Burns Harbor Facility we have identified violations of the facility's Title V Permit, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Integrated Iron and Steel Manufacturing Facilities at 40 C.F.R. Part 63, Subpart FFFFF; the NESHAP for Coke Ovens: Pushing, Quenching, and Battery Stacks at 40 C.F.R. Part 63, Subpart CCCCC; the NESHAP for Steel Pickling–HCL Processing Facilities and Hydrochloric Acid Regeneration Plants at 40 C.F.R. Part 63, Subpart CCC; and the Indiana State Implementation Plan.

Section 113 of the CAA gives us several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action and bringing a judicial criminal action. The option we select, in part, depends on the efforts taken by ArcelorMittal to correct the alleged violations and the timeframe in which you can demonstrate and maintain continuous compliance with the requirements cited in the NOV/FOV.

Before we determine which enforcement option is appropriate, we are offering you the opportunity to request a conference with us about the violations alleged in the NOV/FOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

The EPA contacts for this matter are Brian Dickens and Reza Bagherian. You may call them at (312) 886-6073 or (312) 886-0674, if you wish to request a conference. Legal questions should be directed to Cynthia A. King, Associate Regional Counsel, at 312-886-6831. The EPA hopes that this NOV/FOV will encourage ArcelorMittal's compliance with the requirements of the CAA.

Sincerely,

Cheryl L. Newton
Director
Air and Radiation Division

Enclosure

cc: Janusz Johnson
Office of Enforcement Air Section
Indiana Department Environmental Management
100 North Senate Avenue, Room 1001
Indianapolis, Indiana 46206-6015

United States Environmental Protection Agency
Region 5

IN THE MATTER OF:	)	
	)	
ArcelorMittal Burns Harbor, LLC	)	**NOTICE OF VIOLATION AND**
Burns Harbor, Indiana	)	**FINDING OF VIOLATION**
	)	
Proceedings Pursuant to	)	**EPA-5-11-IN-11**
the Clean Air Act,	)	
42 U.S.C. §§ 7401 et seq.	)	
	)	

NOTICE AND FINDING OF VIOLATION

ArcelorMittal Burns Harbor, LLC (ArcelorMittal) owns and operates an iron and steel manufacturing facility located at 250 West U.S. Highway 12 in Burns Harbor, Indiana (Burns Harbor Facility).

The U.S. Environmental Protection Agency (EPA) is sending this Notice and Finding of Violation (NOV/FOV) to ArcelorMittal pursuant to Sections 113(a)(1) and (3) of the Clean Air Act (CAA), 42 U.S.C. § 7413(a)(1) and (3), to notify ArcelorMittal that at the Burns Harbor Facility we have identified violations of the facility's Title V permit, the National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities at 40 C.F.R. Part 63, Subpart FFFFF (Iron and Steel NESHAP); the NESHAP for Coke Ovens: Pushing, Quenching and Battery Stacks at 40 C.F.R. Part 63, Subpart CCC (Coke Oven NESHAP); the NESHAP for Steel Pickling – HCL Processing Facilities and Hydrochloric Acid Regeneration Plants at 40 C.F.R. Part 63, Subpart CCCCC (Steel Pickling NESHAP); and the Indiana State Implementation Plan (SIP).

I. REGULATORY BACKGROUND

The permits and regulatory provisions relevant to this NOV/FOV are as follows:

a. Iron and Steel NESHAP

The Burns Harbor Facility is subject to the requirements of the Iron and Steel NESHAP at 40 C.F.R. Part 63, Subpart FFFFF. The following requirements are found in the Iron and Steel NESHAP:

i. Pursuant to 40 C.F.R. § 63.7790(d), you must maintain your 30-day rolling average VOC emissions from windbox exhaust at or below 0.2 lb/ton of sinter;

ii. Pursuant to 40 C.F.R. § 63.7800(b), you must prepare and operate at all times

according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in § 63.7790(b);

iii. Pursuant to 40 C.F.R. § 63.7830(e), you must compute and record a 30-day rolling average oil content and VOC emissions; and

iv. Pursuant to 40 C.F.R. § 63.7833(a), you must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in 40 C.F.R. § 63.7790(a) by meeting the requirements in Table 3 to this subpart.

b. Coke Oven NESHAP

The Burns Harbor Facility is subject to the Coke Oven NESHAP at 40 C.F.R. Part 63, Subpart CCCCC. The following requirements are found in the Coke Oven NESHAP:

i. Pursuant to 40 C.F.R. § 63.7295(b), you must wash baffles in quench towers each day that the tower is used to quench coke;

ii. 40 C.F.R. § 63.7296 limits opacity from battery stacks to 15% as a daily average, as determined by a continuous opacity monitor;

iii. Pursuant to 40 C.F.R. § 63.7300(b), you must prepare and operate at all times according to a written operation and maintenance plan; and

iv. Pursuant to 40 C.F.R. § 63.7331(b), you must develop a continuous parameter monitoring system plan, which includes data quality assurance procedures.

c. Steel Pickling NESHAP

The Burns Harbor Facility is subject to the Steel Pickling NESHAP, 40 C.F.R. Part 63, Subpart CCC. The following requirements are found in the Steel Pickling NESHAP:

i. 40 C.F.R. § 63.1157(a) requires that emissions from an existing pickling line be less than 18 ppm of HCl, or a 97% HCl collection efficiency; and

ii. 40 C.F.R. § 63.1162(a)(2) and (4) require that the fume scrubber water flow rate and differential pressure be continuously measured and recorded.

d. Indiana SIP

The Burns Harbor Facility is subject to the Indiana SIP. The following requirements are found in the Indiana SIP:

i. 326 IAC 5-1-2, governing visible emissions, became effective June 16, 1997, 62 Fed. Reg. 18521, as part of the Indiana SIP.

ii. 326 IAC 5-1-2 provides that visible emissions shall not exceed 40% opacity on a six-minute average (24 consecutive readings). The most recent revision of these rules was approved as part of the Indiana SIP on April 16, 1997, 62 Fed. Reg. 18521.

iii. 326 IAC 4-1-2 provides that no person may open burn any material. This regulation was approved as part of the Indiana SIP on May 18, 1983, 48 Fed. Reg. 22294.

iv. 326 IAC 6-4-2 provides that no Permittee shall allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located. The most recent revision of these rules was approved as part of the Indiana SIP on October 28, 1975, 40 Fed. Reg. 50032

e. Title V

The Burns Harbor Facility is a Title V source. The following requirements are found in Title V:

i. Title V of the CAA, 42 U.S.C. §§ 7661a-7661f, establishes an operating permit program for certain sources, including "major sources." Pursuant to Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), on July 21, 1992, 57 Fed. Reg. 32295, the EPA promulgated regulations establishing the minimum elements of a permit program to be administered by any air pollution control agency. These regulations are codified at 40 C.F.R. Part 70.

ii. 40 C.F.R. § 70.2 defines "major source," in part, as any stationary source belonging to a single major industrial grouping and that directly emits or has the potential to emit 100 tons per year (tpy) of any air pollutant, as defined under Section 302 of the CAA, 42 U.S.C. § 7602.

iii. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), states that after the effective date of any permit program approved or promulgated under Title V of the CAA, no source subject to Title V may operate the source except in compliance with its Title V permit.

iv. 40 C.F.R. § 70.7(b) states that no source subject to Title V may operate the source except in compliance with a Title V permit.

v. The EPA promulgated final interim approval of the Indiana Title V program on November 14, 1995, 60 Fed. Reg. 57191, and the program became effective on that date.

vi. The EPA approved 326 IAC 2-7-5, governing Title V permit content, effective December 14, 1995, 60 Fed. Reg. 57188, as part of the Indiana SIP.

vii. 326 IAC 2-7-5(1) provides that Title V permits shall incorporate emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of a Part 70 permit issuance.

viii. EPA approved 326 IAC 2-7-6, governing compliance requirements, effective December 14, 1995, 60 Fed. Reg. 57188, as part of the Indiana SIP.

ix. 326 IAC 2-7-6(1) provides that Title V permits issued under this rule shall contain requirements with respect to compliance certification, testing, monitoring, reporting and record keeping sufficient to assure compliance with the terms and conditions of a Part 70 permit consistent with section 5(3) of this rule.

x. On July 22, 1996, ArcelorMittal's predecessor submitted a Title V Permit application for source ID No. 127-00001. IDEM issued Title V Permit No. 127-6301-00001 to ArcelorMittal for the Burns Harbor Facility on December 27, 2007.

xi. Condition D.3.5 of ArcelorMittal's Title V Permit requires monitoring of the blast furnace granulation milling operations. The instrument used for determining the pressure shall comply with Section C – Instrument Specifications, of this permit, and shall be calibrated in accordance with the manufacturer's specifications.

xii. Condition D.9.3 of ArcelorMittal's Title V Permit requires NOx emissions from the hot dip coating line shall not exceed 2.99 pounds per hour (0.031 pounds per MMBtu).

xiii. Condition D.9.7 (a) of ArcelorMittal's Title V Permit requires eighty percent (80%) destruction efficiency for nitrogen oxides in the proposed selective catalytic reduction/NOx control device (C672-6008), and the following operating parameters shall be maintained: (1) a minimum of 0.8 moles of ammonia per mole of NOx;

xiv. Condition D.9.7(b) of ArcelorMittal's Title V Permit requires that the source shall monitor the nitrogen oxide emissions from the hot dip coating line using a continuous emission monitor;

xv. Condition D.1.6 of ArcelorMittal's Title V Permit, incorporating the requirements set forth in 326 IAC 11-3-2, states that visible emissions must not be present for more than 125 seconds during five consecutive charges; and

xvi. Condition C.14 of ArcelorMittal's Title V Permit requires that ArcelorMittal submit compliance monitoring reports which are certified to be true, accurate,

and complete.

xvii. Section 113(a)(1)-(3) of the CAA, 42 U.S.C. § 7413(a)(1)-(3), authorizes the Administrator to initiate an enforcement action whenever, on the basis of any available information, the Administrator finds that any person has violated or is in violation of a requirement or prohibition of, among others, any implementation plan or permit, Title I or Title V of the CAA, or any rule promulgated, issued, or approved under Title I or Title V of the CAA.

II. BASIS FOR VIOLATIONS

The violations alleged in this NOV/FOV are based on the EPA's review of the following:

i. The EPA inspections of the Burns Harbor Facility on March 8, 2006; July 14, 2006; July 28, 2006; July 31, 2006; August 9, 2006; August 22, 2006; June 1, 2007; June 13, 2007; November 28, 2007; and June 28, 2011;

ii. ArcelorMittal's responses to Section 114 information requests issued on: November 1, 2006; July 10, 2007; February 11, 2008; February 26, 2009; and April 15, 2010;

iii. Quarterly Deviation and Compliance Monitoring Reports from 1st quarter 2008 through 1st quarter 2011;

iv. Semiannual Deviation and Compliance Monitoring Reports for 2008 through 2011; and

v. ArcelorMittal's Section 114 information request responses dated: December 19, 2006; March 16, 2007; March 12, 2007; May 24, 2007; September 7, 2007; September 24, 2007; November 1, 2007; and May 4, 2009.

III. EXPLANATION OF VIOLATIONS

The EPA found the following violations at the Burns Harbor Facility:

a. Sinter Plant Opacity at the Windbox Stack

Regulated by: Indiana SIP 326 IAC 5-1-2(1)(A)

Source(s): Opacity readings taken by an EPA Inspector on August 22, 2006, and by an IDEM Inspector on June 20, 2007
Quarterly Deviation and Compliance Monitoring Report: July 1, 2009 – September 30, 2009

Date(s)	Limit	Exceedance
08/22/06	40%, 6-min avg	50%, 41%
6/20/07	40%, 6-min avg	45%, 43%, 46%

ArcelorMittal reported in its third quarter 2009 Quarterly Deviation and Compliance monitoring report that mass particulate tests at the sinter plant windbox scrubber indicated visible emissions in excess of 40% occurred 45 times (dates not specified).

b. Sinter Plant VOC from Windbox Exhaust Emissions Monitoring

Regulated by: Iron and Steel NESHAP, 40 C.F.R. § 63.7830(e)
Title V Permit, Condition E.1.1

Sources: Semiannual Deviation and Compliance Reports: January 1, 2008 – December 31, 2008

ArcelorMittal reported that it failed to monitor the volatile organic compound (VOC) emissions from the windbox exhaust on 10 days in 2008.

c. Sinter Plant VOC from Windbox Exhaust Emissions Compliance

Regulated by: Iron and Steel NESHAP, 40 C.F.R. § 63.7790(d)
Title V Permit, Condition E.1.1

Sources: Semiannual Deviation and Compliance Monitoring Report: January 1, 2008 – June 30, 2008

ArcelorMittal reported that it failed to maintain the VOC emissions from the windbox exhaust below 0.2 lb/ton of sinter on 25 days in 2008.

d. Sinter Plant - Capture and Control Equipment

Regulated by: Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)
Title V Permit, Attachment A

Sources: Semiannual Deviation and Compliance Reports: January 1, 2008 – December 31, 2008
Semiannual Deviation and Compliance Reports: January 1, 2009 – December 31, 2009
Semiannual Deviation and Compliance Reports: January 1, 2010 – December 31, 2010

i. Failure to take a variety of actions needed to properly operate the capture and control systems on the sinter plant, including failing to meet windbox minimum differential pressure on 2 days in 2008;

ii. Failure to properly monitor windbox scrubber water flowrate from July 11, 2008 through July 18, 2008 by not noticing and repairing defective equipment;

iii. Failure to maintain a discharge end baghouse minimum air flow rate on December 9, 2008;

iv. Failure to meet the minimum control airflow requirement for sinter plant windbox scrubber differential pressure and exhaust air discharge specified by its O&M Plan on 1 day in 2009;

v. Failure to meet the minimum airflow rate for its sinter plant discharge end capture system on 2 days in 2009;

vi. Failure to record at least 18 separate periodic inspection and monitoring requirements during the third and fourth quarters of 2009 at the sinter plant as required by the O&M Plan, including weekly, monthly, and quarterly inspections of equipment to ensure proper operation;

vii. Failure to properly operate the capture and control systems of the sinter plant by leaving the #3 Screw Conveyor Pan ajar on 1 day in 2010; and

viii. Failure to properly operate the capture and control systems of the sinter plant by initiating the baghouse fan vent fan change out during sintering on 1 day in 2010.

e. Blast Furnace Relief Valves and Back Draft Stack

Regulated by: Title V Permit, Condition C.1
Indiana SIP 326 IAC 5-1-2

Source(s): Opacity readings taken by an EPA Inspector on July 31, 2006, and by an ArcelorMittal contractor from April through June, 2009

Date(s)	Limit	Exceedance
07/31/06, C Relief Valves	40%, 6-min avg	42%
4/16/09, C Relief Valves	40%, 6-min avg	49%
4/17/09, C Relief Valves	40%, 6-min avg	54%, 52%
6/10/09, C Relief Valves	40%, 6-min avg	59%, 44%, 42%

f. Open Burning at the Slab Laydown Yard

Regulated by: Indiana SIP 326 IAC 4-1-2

Source: Visual Observations by an EPA Inspector on August 22, 2006

Date(s)	Limit	Exceedance
08/22/06	Open Burning Not Allowed	Open Burning

g. No. 3 BOF Vessel Secondary Control

Regulated by: Indiana SIP 326 IAC 2-1-3 for construction permits

Source: Construction Permit PC64716, dated July 11, 1974, states "some type of auxiliary hoods will be installed for tapping and charging."

On or around April 15, 2006, ArcelorMittal took the charging hood permanently out of service. There was no auxiliary hood in place to capture emissions after this date. Additionally, no tapping hood was in service during an EPA inspection on July 28, 2006.

h. C and D Blast Furnace Opacity at Roof Monitor

Regulated by: Iron and Steel NESHAP, 40 C.F.R. § 63.7790(a), Tables 1 and 3
Title V Permit, Condition D.5.8

Source(s): ArcelorMittal's September 21, 2007, Information Request Response

C Casthouse

Date(s)	Number of Violations
08/08/07	1
08/15/07	1
08/18/07	2
09/11/07	2
09/20/07	2

D Casthouse

Date(s)	Number of Violations
08/06/07	1
08/08/07	1

i. Blast Furnace Coal Granulation Milling Operation

Regulated by: Title V Permit, Condition D.3

Source: Quarterly Deviation and Compliance Monitoring Report First Quarter 2009: January 1, 2009 – March 30, 2009

ArcelorMittal reported that it failed to calibrate the baghouse differential pressure transmitter annually.

j. Hot Dip Coating Line

Regulated by: Title V Permit, Condition D.9.3

Source(s): Quarterly Deviation and Compliance Monitoring Report: January 1, 2009 – March 30, 2009
Quarterly Deviation and Compliance Monitoring Report: January 1, 2008 – March 31, 2008

ArcelorMittal reported that it failed to maintain its NOx emissions below 2.99 lb/hr on 2 days in 2008 and 4 days in 2009.

k. Hot Dip Coating Line

Regulated by: Title V Permit, Condition D.9.7(a)
Title V Permit, Condition D.9.7(b)

Source(s): Quarterly Deviation and Compliance Monitoring Report: April 1, 2009 – June 30, 2009
Quarterly Deviation and Compliance Monitoring Report: October 1, 2009 – December 31, 2009
Quarterly Deviation and Compliance Monitoring Report: January 1, 2010 – December 31, 2010
Quarterly Deviation and Compliance Monitoring Report: January 1, 2011 – March 31, 2011

ArcelorMittal reported that it failed to maintain at least 0.8 moles of ammonia per mole of NOx or failed to maintain the operating temperature of the SCR between 500F and 900F:

Year	Month	Days
2009	January	7, 8
2009	February	13
2009	March	28
2009	June	23, 24
2009	July	7, 10, 11, 12, 13, 14, 15, 25, 26, 29

2009	August	2, 3, 4, 16, 19, 21, 23, 25, 26, 27, 28
2009	September	5, 6, 13, 15, 17, 21, 22, 24, 27, 28, 29
2009	October	2, 3, 8, 9, 11, 19, 29
2009	November	7, 10, 27, 29
2009	December	3, 6, 7, 8, 11, 13, 14, 16, 17, 20, 25, 26, 28, 29, 30
2010	January	1, 2, 9, 12, 15, 16, 19, 21, 23, 24, 25, 29, 30, 31
2010	February	2
2010	March	7, 9, 10, 11, 14, 20, 24, 26, 27, 31
2010	April	1, 5, 6, 11, 12, 16, 18, 26, 28, 29, 30
2010	May	1, 2, 8, 9, 10, 13, 14, 16, 26, 27, 28, 29, 30
2010	June	3, 4, 5, 6, 9, 10, 15, 20, 21, 26, 27, 29
2010	July	27, 29, 31
2010	August	3, 6, 23, 24, 29
2010	September	9, 10
2010	October	10, 11, 17, 19, 20, 23, 24
2010	November	2, 3, 6, 13, 16, 21, 23, 24, 29, 30
2010	December	7, 8, 9, 10, 17, 20, 21, 23, 24, 26, 27, 29, 30
2011	January	6, 11, 13, 14, 16, 18, 24, 25, 26
2011	February	1, 4, 8, 10, 19, 21, 23, 24, 26, 27
2011	March	2, 5, 8, 11, 19, 24, 26, 31

ArcelorMittal reported that on May 6, 10, 14, 24, 2009, it failed to measure the NOx emissions from the coating line using a continuous emission monitor.

ArcelorMittal reported in first quarter of 2011 that PM calibrations of the HDCL NOx analyzer were not completed in time.

l. Fugitive Dust – Iron Beaching

Regulated by: Title V Permit, Condition D.12.1
Indiana SIP 326 IAC 6-4-2

Source: Quarterly Deviation and Compliance Monitoring Report: October 1, 2009 – December 31, 2009
Quarterly Deviation and Compliance Monitoring Report: January 1, 2010 – December 31, 2010
Quarterly Deviation and Compliance Monitoring Report: January 1, 2011 – March 31, 2011

ArcelorMittal reported that iron beaching activities caused particulate matter to cross the property line on the following dates:

Year	Month	Days
2009	January	1, 2, 3, 4
2009	February	12, 27
2009	March	1, 31

2009	April	1, 15, 29
2009	May	6
2009	June	23
2009	July	8, 12, 14, 17, 19, 20, 21
2009	August	3, 4, 10, 13, 26
2009	September	19
2009	November	30
2009	December	10, 11, 12, 27
2010	February	27
2010	March	4, 5
2010	April	11
2010	May	12, 21, 29
2010	June	4, 6, 8, 9, 11
2010	July	5, 6, 12, 16, 18, 19, 20, 21
2010	August	21, 23, 24, 28, 29, 30, 31
2010	September	1, 6, 9, 10, 12, 16, 30
2010	October	2, 3, 5, 8, 9, 15, 16, 26, 27, 28, 31
2010	November	2, 5, 6, 9, 10, 20, 21
2010	December	3, 10, 12, 16, 18, 19, 25, 27, 30
2011	January	11, 21, 22, 23, 24, 26, 27, 31
2011	February	3, 5, 7, 10, 17, 18, 22, 25, 26
2011	March	1, 4, 12, 21, 31

m. Entire Source Fugitive Dust – Iron Beaching

Regulated by: Title V Permit, Condition C.1
Indiana SIP 326 IAC 5-1-2

Source: ArcelorMittal's May 4, 2009, Information Request Response

ArcelorMittal reported opacity from iron beaching in excess of 40% as a 6-minute average on the following date:

Date(s)	Limit	Exceedance
04/01/09	40%, 6-min avg	64%, 81%

n. Emergency Response Plan

Regulated by: Title V Permit, Condition C.17
Indiana SIP 326 IAC 1-5-2

Source: Quarterly Deviation and Compliance Monitoring Report: April 1, 2008 – June 30, 2008

ArcelorMittal reported that it failed to create the Emergency Response Plan and submit it to IDEM within 90 days of receipt of the permit.

o. Coke Oven Battery Stack Opacity

Regulated by: Title V Permit, Condition C.1
Indiana SIP 326 IAC 5-1-2

Source: Quarterly Deviation and Compliance Monitoring Report: October 1, 2009 – December 31, 2009
Quarterly Deviation and Compliance Monitoring Reports: January 1, 2010 – December 31, 2010
Quarterly Deviation and Compliance Monitoring Report: January 1, 2011 – March 31, 2011

ArcelorMittal reported the following violations of the 40% as six-minute average opacity limit at its Coke Oven Battery #1 underfire stack, as monitored by its continuous opacity monitor:

Date(s)	Time	Opacity (40% as six-minute average)
01/15/08	11:37 – 11:43	48%
	11:43 – 11:49	52%
	11:49 – 11:55	43%
01/17/08	00:49 – 00:55	48%
02/15/08	05:55 – 06:01	44%
03/20/08	21:49 – 21:55	47%
04/07/08	13:43 – 13:49	45%
	13:49 – 13:55	46%
	13:55 – 14:01	45%
	14:01 – 14:07	42%
05/14/08	21:31 – 21:37	45%
09/30/08	21:55 – 22:01	41%
12/23/08	17:49 – 17:55	49%
05/01/09	02:37 – 02:43	45%
	02:43 – 02:49	47%
05/08/09	02:13 – 02:19	59%
06/27/09	18:37 – 18:43	44%
7/10/09	16:49-16:55	41%
07/17/09	00:43 – 00:49	56%
	00:49 – 00:55	42%
09/27/09	20:13 – 20:19	49%
10/21/09	13:37 – 13:43	48%
10/22/09	19:19 – 19:25	43%
12/11/09	19:07 – 19:13	41%
01/12/10	02:13 – 02:19	43%
03/10/10	06:43 – 06:49	52%
03/11/10	00:19 – 00:25	51%

03/25/10	08:13 – 08:19	44%
05/04/10	00:25 – 00:31	45%
	00:31 – 00:37	42%
05/05/10	20:13 – 20:19	52%
	22:25 – 22:31	42%
	23:01 – 23:07	47%
05/06/10	08:01 – 08:07	57%
	08:07 – 08:13	46%
6/25/10	21:01-22:59	25%
07/13/10	15:25 – 15:31	42%
07/15/10	12:49 – 12:55	45%
08/24/10	06:49 – 06:55	57%
02/11/11	22:31 – 22:37	49%
02/17/11	02:01 – 02:07	41%
02/25/11	18:31 – 18:37	47%

p. Coke Oven Battery Fugitive Opacity

Regulated by: Title V Permit, Condition D.1.6
Indiana SIP 326 IAC 11-3-2(b)(4)
Indiana SIP 326 IAC 11-3-2(d)(4)
Indiana SIP 326 IAC 11-3-2(f)(4)

Source: Observations made by an IDEM inspector
Quarterly Deviation and Compliance Monitoring Report: July 1, 2008 – September 30, 2008

Charging Systems:

Date(s)	Limit	# of Violations
08/30/06	125 sec, 5 charges	1
07/18/07	125 sec, 5 charges	1
August 2008 (date not specified)	125 sec, 5 charges	1

Source: Quarterly Deviation and Compliance Monitoring Report: October 1, 2009 – December 31, 2009
Quarterly Deviation and Compliance Monitoring Reports: January 1, 2010 – December 31, 2010
Quarterly Deviation and Compliance Monitoring Report: January 1, 2011 – March 31, 2011

Offtake Piping:

Date(s)	Limit	# of Violations
May 2009	10% offtake piping	1
July 2010	10% offtake piping	1

Oven Doors:

Date(s)	Limit	# of Violations
March 2010	10% oven doors	1
April 2010	10% oven doors	1
May 2010	10% oven doors	1
August 2010	10% oven doors	2
September 2010	10% oven doors	2

q. Coke Oven Battery Stack Continuous Opacity Monitors

Regulated by: Coke Oven NESHAP, 40 C.F.R. § 63.7331(b)
Title V Permit, Attachment A

Source: Quarterly Deviation and Compliance Monitoring Report: January 1, 2009 – March 31, 2009

ArcelorMittal reported that it failed to document data quality assurance procedures for the continuous opacity monitors on the underfire battery stack from January 1, 2009, to February 20, 2009.

r. Coke Oven Battery #1 Pushing Baghouse

Regulated by: Coke Oven NESHAP, 40 C.F.R. § 63.7300(b)
Title V Permit, Attachment A

Source: Semiannual Deviation and Compliance Monitoring Report: July 1, 2008 – December 31, 2008
Semiannual Deviation and Compliance Monitoring Reports: January 1, 2009 – December 31, 2009

Failure to Operate Baghouse Associated with the Coke Oven Battery:

Date(s)	Coke Oven Battery	# of Violations
04/16/08	#1	1
08/27/08	#1	1
09/20/08	#1	1
09/24/08	#1	1
02/12/09	#1	1
08/03/09	#1	1
02/05/10	#1	1
04/02/10	#1	1
06/02/10	#1	1

s. Coke Oven Battery #2 Pushing Baghouse

Regulated by: Coke Oven NESHAP, 40 C.F.R. § 63. 7300(b)
Title V Permit, Attachment A

Source(s): Semiannual Deviation and Compliance Monitoring Report: January 1, 2009 – June 30, 2009
Semiannual Deviation and Compliance Monitoring Report: July 1, 2008 – December 31, 2008

Failure to Operate Baghouse Associated with the Coke Oven Battery:

Date(s)	Coke Oven Battery	# of Violations
09/24/08	#2	1
02/12/09	#2	1

t. Coke Oven Battery Pushing Baghouse Fan Amperage

Regulated by: Coke Oven NESHAP, 40 C.F.R. § 63.7300(b)
ArcelorMittal's Title V Permit, Attachment A

Sources: Semiannual Deviation and Compliance Monitoring Report: July 1, 2008 – December 31, 2008

ArcelorMittal reported that it failed to record fan amperage for the pushing emissions control system on at least 8 days.

u. Coke Oven Battery Pushing Baghouse Quench Baffles

Regulated by: Coke Oven NESHAP 40 C.F.R. § 63.7295(b),
Title V Permit, Attachment A

Evidence: Seminannual Deviation and Compliance Monitoring Report: July 1, 2008 – December 31, 2008
Seminannual Deviation and Compliance Monitoring Report: July 1, 2009 – December 31, 2009
Seminannual Deviation and Compliance Monitoring Report: January 1, 2010 – June 30, 2010

ArcelorMittal reported that it failed to wash the quench baffles on July 15, 2008, November 3, 2009, and June 25-27, 2010

v. Pickling Line Parametric Monitoring

Regulated by: Steel Pickling NESHAP, 40 C.F.R. § 63.1162(a)(2) and (4)
Title V Permit, Attachment A

Sources: Semiannual Deviation and Compliance Monitoring Report: July 1, 2008 – December 31, 2010
Semiannual Deviation and Compliance Monitoring Report: July 1, 2008 – December 31, 2010

Failure to Continuously Measure and Record Fume Scrubber Flow Rate and Differential Pressure:

Date(s)	# of Violations
07/27/08	1
09/21/09	1
11/18/09	1
11/28/09	1

w. Pickling Line HCl Emissions

Regulated by: Steel Pickling NESHAP, 40 C.F.R. § 63.1157(a)
Title V Permit, Attachment A

Sources: Semiannual Deviation and Compliance Monitoring Report: July 1, 2008 – December 31, 2008

Failure to Comply with Scrubber Collection Efficiency:

Date(s)	Limits	# of Violations
07/21/08 – 08/12/08	18 ppm or 97% cont. eff.	1
08/15/08 – 09/12/08	18 ppm or 97% cont. eff.	1
09/17/08	18 ppm or 97% cont. eff.	1

ArcelorMittal reported that operating problems were reasonably expected to have caused emissions of HCl exceeding 18 ppm or less than 97% collection efficiency.

x. Pickling Line Scrubber Flow Rate

Regulated by: Steel Pickling NESHAP, 40 C.F.R. § 63.1161(b)
Title V Permit, Attachment A

Sources: Semiannual Deviation and Compliance Monitoring Report: July 1, 2008 – December 31, 2008
Semiannual Deviation and Compliance Monitoring Report: July 1, 2010 – December 31, 2010

Failure to Attain Scrubber Flow Rate within Permitted Range:

Date(s)	Time(s)
10/15/08	14:26 – 14:30
12/14/10	08:48 – 09:30
02/06/10	13:00 – 13:34

y. Roads Fugitive Dust Plan

Regulated by: Title V Permit, Condition D.12.4

Sources: Quarterly Deviation and Compliance Monitoring Reports: January 1, 2009 – September 30, 2009
Quarterly Deviation and Compliance Monitoring Reports: January 1, 2010 – March 31, 2010
Quarterly Deviation and Compliance Monitoring Reports: October 1, 2010 – December 31, 2010

ArcelorMittal reported that the average vehicle weight on slab hauler roads exceeded 157 tons. ArcelorMittal reported that monthly vehicle inspections were missing for some vehicles.

z. Blast Furnaces - Capture and Control Equipment

Regulated by: Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)
Title V Permit, Condition E.1.1

Source: Semiannual Deviation and Compliance Reports: January 1, 2008 – December 31, 2008
Semiannual Deviation and Compliance Reports: January 1, 2009 – December 31, 2009
Semiannual Deviation and Compliance Reports: January 1, 2010 – December 31, 2010

i. Failure to meet minimum control device airflows at the C Blast Furnace tapping hoods on 54 days in 2008, 43 days in 2009, and 9 days in 2010;

ii. Failure to meet minimum control device airflows at the C Blast Furnace tilting runner hoods on 62 days in 2008, 42 days in 2009, and 6 days in 2010;

iii. Failure to meet minimum control device airflows at the D Blast Furnace tapping hoods on 20 days in 2008, and 13 days in 2010;

iv. Failure to meet minimum control device airflows at the D Blast Furnace tilting runner hoods on 13 days in 2008;

v. Furnace C operated with only intermittent use of a baghouse leak detection system in place from January 29, 2008, to February 5, 2008;

vi. Failure to properly operate the capture and control system on the C Blast Furnace casthouse, including failing to respond to bag leak detection alarms as required on 11 days in 2008; and

vii. Failure to properly operate the capture and control system on the D Blast Furnace casthouse, including failure to respond to bag leak detection alarms as required on 9 days in 2008.

aa. Blast Furnaces -- Monitoring Equipment

Regulated by: Iron and Steel NESHAP, 40 C.F.R. § 63.7830(a)
Iron and Steel NESHAP, 40 C.F.R. § 63.7832(a)
Title V Permit, Condition E.1.1

Source: Semiannual Deviation and Compliance Report: June 1, 2008 – December 31, 2008

Failure to record the capture airflow at the D Furnace from September 12, 2008, through September 25, 2008. ArcelorMittal did not take reasonable action to cease the generation of emissions after the monitoring equipment had malfunctioned or remedy the equipment malfunction (probe failure) in a timely manner.

bb. BOF Shop -- Capture and Control Equipment

Regulated by: Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)
Title V Permit, Condition E.1.1

Sources: Semiannual Deviation and Compliance Reports: January 1, 2008 – December 31, 2008
Semiannual Deviation and Compliance Reports: January 1, 2009 – December 31, 2009
Semiannual Deviation and Compliance Reports: January 1, 2010 – December 31, 2010

i. Failure to perform monthly inspections in 2008;

ii. Failure to respond to bag leak detection alarms on 3 days at the BOF baghouse, 18 days on the Hot Metal Desulfurization (HMD) baghouse, and 7 days on Ladle transfer baghouse in 2008;

iii. Failure to meet minimum collection systems airflows on the #1 BOF vessel on 55 days in 2008 and 1 days in 2009;

iv. Failure to record collection systems airflows on #1 BOF vessel on 5 days in 2008;

v. Failure to meet minimum collection systems airflows on #2 BOF vessel on 1 days in 2008;

vi. Failure to record collection systems airflows on #2 BOF vessel on 66 days in 2008;

vii. Failure to meet minimum collection systems airflows on #3 BOF vessel on 2 days in 2008;

viii. Failure to record collection systems airflows on #3 BOF vessel on 7 days in 2008;

ix. Failure to meet minimum differential pressure on #1 through #4 scrubbers on 24 days in 2008;

x. Failure to keep record of steel production cycle on 1 day in 2008;

xi. Insufficient water flow rate through scrubbers #1 through #4 on 9 days in 2008;

xii. Failure to take action to remedy alarms, document the remedy, or the system failed to alarm or record readings as specified in the O&M Plan associated with the BOF shop operations on 21 days in 2008, on 12 days in 2009, and 7 days in 2010; and

xiii. Weekly confirmation of dust removal from the hoppers in the #4 LTS Baghouse, #5 LTS Baghouse, #2 HMD, #3 HMD, #2/3 HMD, and SECS/MACT Baghouse were not recorded on 1 day in 2010.

cc. Blast Furnace Granulated Coal Injector Baghouse #1 and #2

Regulated by: Title V Permit, Condition D.3.5

Sources: Quarterly Deviation and Compliance Monitoring Report: January 1, 2009 – March 31, 2009
Quarterly Deviation and Compliance Monitoring Report: April 1, 2010 – June 30, 2010
Quarterly Deviation and Compliance Monitoring Report: October 1, 2010 – December 31, 2010
Quarterly Deviation and Compliance Monitoring Report: January 1, 2011 – March 31, 2011

i. The daily differential pressure check was not completed for 18 days during the second quarter of 2010;

ii. The weekly Granulated Coal Injector (GCI) inspections were not performed for 3 weeks during the second quarter of 2010; and

iii. The annual calibration of the differential pressure sensor for GCI system #1 and #1 baghouses was not performed in 2010.

dd. Equipment Calibration and Inspection

Regulated by: Title V Permit, Condition B.10

Sources: Quarterly Deviation and Compliance Monitoring Reports: January 1, 2010 – December 31, 2010
Quarterly Deviation and Compliance Monitoring Report: January 1, 2011 – March 31, 2011

i. Preventative maintenance plans were not fully implemented in second quarter of 2010;

ii. Monthly preventative maintenance plan inspections and/or calibrations of the vacuum degasser baghouse not performed in second quarter of 2010;

iii. Monthly preventative maintenance plan inspections and/or calibrations of the Flux Bin Baghouse not performed in second quarter of 2010;

iv. Monthly preventative maintenance plan inspections and/or calibrations of the H1 and H2 Junction baghouse not performed in second quarter of 2010;

v. Monthly preventative maintenance plan inspections and/or calibrations of the Track Hopper Baghouse not preformed in second quarter of 2010;

vi. Monthly preventative maintenance plan inspections and/or calibrations of the Weigh Hopper Baghouse not performed in second quarter of 2010;

vii. Monthly preventative maintenance plan inspections and/or calibrations of the Ladle/Subcar Dryer not performed in second quarter of 2010;

viii. Monthly preventative maintenance plan inspections and/or calibrations of the Vacuum Degasser Flare not performed in second quarter of 2010;

ix. Monthly preventative maintenance plan inspections and/or calibrations of the Gas Analyzer and Flare Stack at the Vacuum Degasser not performed in second quarter of 2010;

x. HDCL FCE NOx analyzer downturn preventative maintenance not completed in third quarter of 2010;

xi. Quarterly and annual inspection of #2 Roll blaster baghouse not completed on time in third quarter of 2010;

xii. Annual calibration of C BF Stoves coke oven gas (COG), blast furnace gas (BFG), and natural gas (NG) fuel meter not completed in third quarter of 2010;

xiii. Semiannual calibration of the C BF BFG FCE Flare pilot light/thermocouple was not completed in 2010;

xiv. 2- month inspection of the car dumper baghouse was missed in third quarter of 2010;

xv. Monthly preventative maintenance of the vacuum degasser baghouse not completed in third quarter of 2010;

xvi. Flow meter calibration of the BOF Ladle Dryer not completed for 6 dryers in third quarter of 2010;

xvii. Weekly preventative maintenance of the caster mist eliminators not completed 4 times in third quarter of 2010;

xviii. Annual inspection of the CHTL Scrubber not completed on time in 2010;

xix. Missed annual calibration of the Power Station #9 NG, COG, BFG fuel meters in 2010;

xx. Semiannual mechanical inspection of north and south blast booth performed 11 days late in 2010;

xxi. Semiannual inspection of #2 Roll shop blaster baghouse not performed in 2010;

xxii. Annual calibration C BF Stoves NG Fuel meter not completed on time in 2010;

xxiii. Semiannual flow meter calibration on the C BF BFG FCE Flare was not completed on time in 2010;

xxiv. BFG C FCE Flare pilot light/thermocouple equipment check not completed on time in fourth quarter of 2010;

xxv. Annual fan amp calibration on the north and south car dumper baghouse not completed in fourth quarter of 2010;

xxvi. Monthly inspection of the BOF Vacuum degasser baghouse one not completed in fourth quarter of 2010;

xxvii. Quarterly inspection of the BOF Flux bin baghouse not completed on time in fourth quarter of 2010;

xxviii. Annual NG Flow calibration of the BOF ladle dryer not performed in 2010;

xxix. Annual NG Flow calibration of the two BOF Sub Car Dryers not completed in 2010;

xxx. Annual gas analyzer certification and flare calibration of the BOF VDG Flare Stack not performed in 2010;

xxxi. Weekly mechanical inspections and lube inspections of the caster fog exhauster not performed one week of the quarter in fourth quarter of 2010;

xxxii. Annual inspection of the Hot Strip Mill Reheat Furnaces #1, #2, and #3 not performed; in 2010

xxxiii. Quarterly Inspection of the Cold Strip Mill Temper Mill Mist eliminator not performed in fourth quarter of 2010;

xxxiv. Annual inspection of the Cold Strip Mill HDCL Scrubber not performed in 2010;

xxxv. Maintenance records for the Cold Strip Mill HDCL and NOx Analyzer turndown were not available in the fourth quarter of 2010;

xxxvi. Annual calibration of the car dumper baghouse not completed on time in 2011;

xxxvii. Blast furnace C and D BFG flare thermocouple calibrations not completed on time in first quarter of 2011;

xxxviii. Calibrations of the Hot Strip Mill Reheat Furnace COG not completed on time in first quarter of 2011;

xxxix. Semiannual inspection of the Hot Strip Mill #2 Roll Shop Grinder Baghouse not completed on time in 2011; and

xl. Weekly inspections of the Caster #1 and #2 Demister not completed twice in first quarter of 2011.

IV. ENVIRONMENTAL IMPACT OF VIOLATIONS

a. Violation of the opacity standards increases public exposure to unhealthy particulate matter. Particulate matter, especially fine particulate,

contributes to respiratory problems, lung damage and premature deaths.

b. Ground level concentrations of SO_2 contribute to respiratory illness, particularly in children and the elderly and aggravate existing heart and lung diseases. Peak levels of SO_2 in the ambient air can cause temporary breathing difficulty for people with asthma who are active outdoors. Longer-term exposures to high levels of SO_2 gas and particles cause respiratory illness and aggravate existing heart disease.

c. Violations of the monitoring, recordkeeping and reporting requirements prevent U.S. EPA from knowing whether an affected facility has maintained compliance with the applicable emission standards.

10/21/11
Date

Cheryl L. Newton
Director
Air and Radiation Division

CERTIFICATION OF MAILING

I, Betty Williams, certify that I sent a Notice and Finding of Violation, No. EPA-5-11-IN-11, by Certified Mail, Return Receipt Requested, to:

Rob Maciel
Environmental Manager
250 West U.S. Highway 12
Burns Harbor, Indiana 46304

I also certify that I sent a copy of the Notice and Finding of Violation, No. EPA-5-11-IN-11, by first class mail to:

Janusz Johnson
Office of Enforcement Air Section
Indiana Department Environmental Management
100 North Senate Avenue, Room 1001
Indianapolis, Indiana 46206-6015

on the 26th day of October 2011.

Betty Williams
Betty Williams
Administrative Program Assistant
AECAB/AECAS/PAS

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Reza Bagherian, AE-17J

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

OCT 24 2011

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

James Flannery, Environmental Affairs Manager
Mittal Steel USA - Indiana Harbor East
3210 Watling Street
East Chicago, Indiana 46312

Dear Mr. Flannery:

This is to advise you that the U.S. Environmental Protection Agency (EPA) has determined that the ArcelorMittal Steel USA (ArcelorMittal) – Indiana Harbor East facility located at 3210 Watling Street, East Chicago, Indiana (IHE Facility), is in violation of the Clean Air Act (the CAA) and associated state pollution control requirements.

The EPA is sending this Notice of Violation and Finding of Violation (NOV/FOV) to notify you that at the IHE Facility we have identified violations of the facility's Title V permit, the National Emission Standards for Hazardous Air Pollutants for Iron and Steel Manufacturing Facilities at 40 C.F.R. Part 63, Subpart FFFFF, the New Source Performance Standard for Electric Arc Furnaces at Steel Plants at 40 C.F.R. Part 60, Subpart AAa, and the Indiana State Implementation Plan.

Section 113 of the CAA gives us several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action, and bringing a judicial criminal action. The option we select depends in part on the efforts taken by ArcelorMittal to correct the alleged violations and the timeframe in which you can demonstrate and maintain continuous compliance with the requirements cited in the NOV/FOV.

Before we determine which enforcement option is appropriate, we are offering you the opportunity to request a conference with us about the violations alleged in the NOV/FOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

The EPA contact in this matter is Daniel Schaufelberger. You may call him at (312) 886-6814, if you wish to request a conference. Legal questions should be directed to Cynthia A. King, Associate Regional Counsel, at 312-886-6831. The EPA hopes that this NOV/FOV will encourage ArcelorMittal's compliance with the requirements of the CAA.

Sincerely,

Cheryl L. Newton
Director
Air and Radiation Division

Enclosure

cc: Phil Perry, Indiana Department of Environmental Management

United States Environmental Protection Agency
Region 5

IN THE MATTER OF: ArcelorMittal Steel USA – Indiana Harbor East East Chicago, Indiana Proceedings Pursuant to the Clean Air Act, 42 U.S.C. §§ 7401 et seq.	)	**NOTICE OF VIOLATION AND FINDING OF VIOLATION** **EPA-5-11-IN-14**

NOTICE AND FINDING OF VIOLATION

ArcelorMittal Steel USA – Indiana Harbor East (ArcelorMittal) owns and operates an iron and steel manufacturing facility located at 3210 Watling Street, East Chicago, Indiana (IHE Facility).

The U.S. Environmental Protection Agency (EPA) is sending this Notice of Violation and Finding of Violation (NOV/FOV) to ArcelorMittal pursuant to Sections 113(a)(1) and (3) of the Clean Air Act (CAA), 42 U.S.C. § 7413(a)(1) and (3), to notify ArcelorMittal that at the IHE Facility we have identified violations of the facility's Title V permit, the National Emission Standards for Hazardous Air Pollutants) for Iron and Steel Manufacturing Facilities at 40 C.F.R. Part 63, Subpart FFFFF (Iron and Steel NESHAP), the New Source Performance Standard (NSPS) for Electric Arc Furnaces at Steel Plants at 40 C.F.R. Part 60, Subpart AAa, and the Indiana State Implementation Plan (SIP).

I. REGULATORY PROVISIONS

The permit and regulatory provisions relevant to this NOV/FOV are as follows:

Title V

a. Title V of the CAA, 42 U.S.C. §§ 7661a-7661f, establishes an operating permit program for certain sources, including "major sources." Pursuant to Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), on July 21, 1992, at 57 Fed. Reg. 32295, the EPA promulgated regulations establishing the minimum elements of a permit program to be administered by any air pollution control agency. These regulations are codified at 40 C.F.R. Part 70.

b. 40 C.F.R. § 70.2 defines "major source," in part, as any stationary source belonging to a single major industrial grouping and that directly emits or has the potential to emit 100 tons per year (tpy) of any air pollutant, as defined under Section 302 of the CAA, 42 U.S.C. § 7602.

c. 40 C.F.R. § 70.7(b) provides that no source subject to Title V may operate the source except in compliance with a Title V permit.

d. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), provides that after the effective date of any permit program approved or promulgated under Title V of the CAA, no source subject to Title V may operate the source except in compliance with its Title V permit.

e. The EPA promulgated final interim approval of the Indiana Title V program on November 14, 1995, 60 Fed. Reg. 57191, and the program became effective on that date.

f. The regulation at 40 C.F.R. § 70.6(b)(1) specifies that all terms and conditions in a permit issued under a Part 70 program, including any provisions designed to limit a source's potential to emit, are enforceable by the EPA under the CAA.

g. The EPA approved 326 IAC 2-7-5, governing Title V permit content, effective December 14, 1995, 60 Fed.Reg. 57188, as part of the Indiana SIP.

   i. 326 IAC 2-7-5(1) provides that Title V permits shall incorporate emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of a Part 70 permit issuance.

h. The EPA approved 326 IAC 2-7-6, governing compliance requirements, effective December 14, 1995, 60 Fed. Reg. 57188, as part of the Indiana SIP.

   i. 326 IAC 2-7-6(1) provides that Title V permits issued under this rule shall contain requirements with respect to compliance certification, testing, monitoring, reporting and record keeping sufficient to assure compliance with the terms and conditions of a Part 70 permit consistent with section 5(3) of this rule.

i. The IHE Facility is subject to Title V Permit No. T089-6577-00316, issued by the Indiana Department of Environmental Management (IDEM) with an effective date of September 12, 2006.

The following provisions are found in ArcelorMittal's Title V Permit for the IHE Facility:

a. Condition C.18 of ArcelorMittal's Title V operating permit states that records of all required monitoring data, reports and support information required by th[e] permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long

as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

b. Condition D.1.7 of ArcelorMittal's Title V operating permit states that in the event that a scrubber system failure has been observed, the feed to the process must be shut off immediately, and the process shall be shut down as soon as practicable, until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit.

c. Condition D.2.8 of ArcelorMittal's Title V operating permit states that in order to make requirements of 326 IAC 2-2 (PSD) not applicable, on and after the date of issuance of Significant Source Modification 089-16966-00316, issued on November 26, 2003, the operation of the slag pits at No.7 Blast Furnace shall be curtailed to 227,472 tons of slag processed at these facilities per 12 consecutive month period with compliance demonstrated at the end of each month.

d. Condition D.5.1(f) of ArcelorMittal's Title V operating permit provides that pursuant to 326 IAC 6.9-2-17, total suspended particulate from the No. 2 BOF No. 20 off-gas scrubber stack shall not exceed 0.015 grains per dry standard cubic foot and 12.00 pounds per hour.

e. Condition D.5.1(e) of ArcelorMittal's Title V operating permit provides that pursuant to 326 IAC 6.9-2-17, total suspended particulate from the No. 2 BOF No. 20 off-gas scrubber stack shall not exceed 0.058 pounds per ton and 16.00 pounds per hour.

f. Condition D.5.2(f) of ArcelorMittal's Title V operating permit provides that pursuant to 326 IAC 6.8-3-2, opacity for the No. 2 basic oxygen furnace (BOF) shop roof monitor shall not exceed twenty percent (20%) as a 3-minute average.

g. Condition D.6.4(b) of ArcelorMittal's Title V operating permit provides that pursuant to 326 IAC 6.8-3-2, opacity for the No. 4 BOF shop roof monitor shall not exceed twenty percent (20%) as a 3-minute average.

h. Condition C.1(a) of ArcelorMittal's Title V operating permit provides that pursuant to 326 IAC 5-1-2(2)(B), opacity for the blast furnace casthouse monitor Nos. 5 and 6 shall not exceed twenty percent (20%) as a 6-minute average.

i. Condition D.2.3 of ArcelorMittal's Title V operating permit provides that pursuant to 326 IAC 6.8-3-2, opacity for the blast furnace casthouse monitor No. 7 shall not exceed fifteen percent (15%) as a 6-minute average.

j. Condition B.14 of ArcelorMittal's Title V Permit states that ArcelorMittal must submit compliance monitoring reports which are certified to be true, accurate, and complete.

Indiana SIP

a. The EPA approved 326 IAC 5-1-2, governing visible emissions, effective June 16, 1997, 62 Fed. Reg.18521, as part of the federally enforceable Indiana SIP.

   i. 326 IAC 5-1-2(2)(B) states that visible emissions from a facility located in Lake County shall not exceed an average of twenty percent (20%) opacity in twenty-four consecutive readings unless otherwise specified in 326 IAC 6-1-10.1.

b. The EPA approved 326 IAC 6.8, governing particulate matter, effective May 22, 2006, 71 Fed. Reg. 14383, as part of the Indiana SIP.

   i. 326 IAC 6.8-10-3(7)(D) states that there shall be a zero percent (0%) frequency of visible emission observations from a building enclosing all or part of the material processing equipment except from a vent in the building. Compliance with this standard shall be determined by 40 C.F.R . Part 60, Appendix A, Method 22.

   ii. 326 IAC 6.8-10-3(6)(A) provides that there shall be a zero percent (0%) frequency of visible emission observations of a material during the in-plant transportation of material by truck or rail at any time. Compliance with this standard shall be determined by 40 C.F.R. Part 60, Appendix A, Method 22.

   iii. 326 IAC 6.8-3-2 provides that the Facility's Number 2 basic oxygen furnace roof monitor shall meet a 20% opacity based on a 3-minute average.

   iv. 326 IAC 6.8-3-2 provides that the Facility's Number 4 basic oxygen furnace roof monitor shall meet a 20% opacity based on a 3-minute average.

   v. 326 IAC 6.8-3-2 provides that the Facility's Number 7 blast furnace casthouse shall meet a 15% opacity based on a 6-minute average.

   vi. 326 IAC 6.8-2-17 provides that the Facility's Number 2 basic oxygen furnace number 20 furnace stack shall meet an emission limit of 0.058 lbs/ton TSP and 16.00 lbs/hr TSP.

   vi. 326 IAC 6.8-2-17 provides that the Facility's Number 2 basic oxygen furnace secondary ventilation system scrubber shall meet an emission limit of 0.015 gr/dscf TSP and 12.00 lbs/hr TSP.

c. Within 30 days following the end of each calendar quarter, ArcelorMittal is required to submit reports to the IDEM documenting all instances of opacity values in excess of the limitations specified in Indiana SIP 326 IAC 5-1-2(2)(B). These reports must detail the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

Iron and Steel NESHAP

The IHE Facility is subject to the Iron and Steel NESHAP, 40 C.F.R. Part 63, Subpart FFFFF.

The following requirements are found in the Iron and Steel NESHAP:

i. 40 C.F.R. § 63.7790(a) states that the affected facility must meet the applicable emission limit and opacity limit in Table 1 of the subpart. Table 1 at Condition 9a states that each basic oxygen process furnace (BOPF) at a new or existing shop must not cause to be discharged to the atmosphere any gases that exit from a primary emission control system for a BOPF with a closed hood system, on a flow-weighted basis, particulate matter in excess of 0.03 gr/dscf during the primary oxygen blow.

ii. 40 C.F.R. § 63.7790(b)(2) states that the affected facility must meet the applicable emission limit and opacity limit in Table 1 of the subpart. Table 1 at Condition 9c states that each Basic Oxygen Process Furnace (BOPF) at an existing shop must not cause to be discharged to the atmosphere any gases that exit from a control device used solely for the collection of secondary emissions from the BOPF that contain particulate matter in excess of 0.01 gr/dscf.

iii. 40 C.F.R. § 63.7790(b)(2) states that the affected facility must meet the applicable emission limit and opacity limit in Table 1 of the subpart. Table 1 at Condition 12 states that each BOPF at an existing shop must not cause to be discharged to the atmosphere secondary emissions that exit any opening in the BOPF shop or any other building housing the BOPF or BOPF shop operation that exhibit opacity greater than twenty percent (20%) on a 3-minute average basis.

iv. 40 C.F.R. § 63.7790(a) states that the affected facility must meet the applicable emission limit and opacity limit in Table 1 of the subpart. Table 1 at Condition 7 states that each casthouse at an existing blast furnace must not cause to be discharged to the atmosphere secondary emissions that exit any opening in the casthouse or structure housing the blast furnace that exhibit opacity greater than twenty percent (20%) on a 6-minute average basis.

New Source Performance Standards

The IHE Facility is subject to the NSPS, 40 C.F.R. Part 60, Subpart AAa.

a. 40 C.F.R. § 60.8(a) states that within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, the owner or operator shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

b. 40 C.F.R. § 60.7(a)(1) requires owners or operators subject to the NSPS to furnish, to the Administrator, written notification of the date construction of an affected facility is commenced, postmarked no later than 30 days after such date.

c. 40 C.F.R. § 60.7(a)(3) requires owners or operators subject to the NSPS to furnish, to the Administrator, a written notification of the actual date of initial startup of an affected facility, postmarked no later than 15 days after such date.

d. 40 C.F.R. § 60.272(a)(2) requires that the atmospheric discharge from an electric arc furnace control device shall not exhibit an opacity of 3 percent or greater.

e. 40 C.F.R. § 60.272(a)(3) requires that the atmospheric discharge from a shop, and due solely to the operations of any affected EAF(s) shall not exhibit an opacity of 6 percent or greater.

Section 113(a)(1)-(3) of the CAA, 42 U.S.C. § 7413(a)(1)-(3), authorizes the Administrator to initiate an enforcement action whenever, on the basis of any available information, the Administrator finds that any person has violated or is in violation of a requirement or prohibition of, among others, any implementation plan or permit, Title I or Title V of the CAA, or any rule promulgated, issued, or approved under Title I or Title V of the CAA.

II. BASIS FOR VIOLATIONS

The violations alleged in this NOV/FOV are based on the following:

a. Quarterly Deviation and Compliance Monitoring Reports from April, 2006 through March, 2011;

b. Stack tests performed at the No. 2 BOF #20 Furnace Off-Gas Scrubber on the following dates: August 8, 2006; August 9, 2006; August 11, 2006; September 18, 2006; and September 22, 2006;

c. Stack tests performed at the No. 2 BOF Secondary Vent Scrubber Stack on the following dates: August 16, 2006; September 14, 2006; November 8, 2006; January 4, 2007; and January 5, 2007;

d. Method 9 readings at the No. 7 Blast Furnace dust catcher cyclone dump performed during a March 25, 2007 compliance inspection;

e. Method 22 visual emissions observations of railcar material transfer conducted on March 26, 2007;

f. Method 9 visual emissions reading conducted at the No. 4 BOF shop roof monitor on July 13, 2006 and September 5, 2006;

g. Method 9 visual emissions readings conducted at the No. 5 Blast Furnace Casthouse roof monitor on July 2, 2006;

h. Method 9 visual emissions readings conducted at the No. 6 Blast Furnace Casthouse roof monitor on July 3, 2006, July 7, 2006, and October 15, 2006; and

i. Method 9 visual emissions readings conducted at the No. 7 Blast Furnace Casthouse roof monitor on September 29, 2006

III. EXPLANATATION OF VIOLATIONS

The EPA found the following violations at the IHE Facility:

1. In 1996, ArcelorMittal replaced the No. 1 Electric Arc Furnace 65 MVA transformer with a 120 MVA transformer. This transformer project constitutes a modification, as that term is defined in 40 C.F.R. § 60.14 of the NSPS regulations and thus subjects ArcelorMittal to its applicable requirements at 40 C.F.R. Part 60, Subpart AAa.

2. No. 5 Blast Furnace Casthouse Roof Monitor Opacity

Regulated by: Title V Permit No. T089-6577-00316, Condition C.1(a)
Indiana SIP 326 IAC 5-1-2(2)(B)
Iron and Steel NESHAP, Table 1(7)

Sources: Semiannual Deviation and Compliance Monitoring Report: July - December 2006
Quarterly Deviation and Compliance Monitoring Report: July – September, 2007
Quarterly Deviation and Compliance Monitoring Report: October – December, 2009

Date(s)	Limit	Exceedance
07/02/06	20%, 6-min average	1 6-min average
07/01/07	20%, 6-min average	1 6-min average
10/13/09	20%, 6-min average	1 6-min average

3. No. 5 Blast Furnace Casthouse Scrubber Not Operating During Cast

Regulated by: Title V Permit No. T089-6577-00316, Condition D.1.7

Sources: Quarterly Deviation and Compliance Monitoring Reports: January, 2007 – June, 2010

The No. 5 Blast Furnace Casthouse Scrubbers (North and South) were not operating while the blast furnace was in operation on the following dates: 8/08/09, 8/14/09, 8/19/09, 8/20/09, 8/26/09, 9/11/09, 9/25/09, 10/10/09, 10/27/09, 11/11/09, 11/23/09, 12/24/09, 12/28/09, 1/6/10, 1/11/10, 3/15/10, 3/22/10, 4/6/10, 5/5/10, 5/6/10, 5/19/10

4. No. 6 Blast Furnace Casthouse Roof Monitor Opacity

Regulated by: Title V Permit No. T089-6577-00316, Condition C.1(a)
Indiana SIP 326 IAC 5-1-2(2)(B)
Iron and Steel NESHAP, Table 1(7)

Sources: Semiannual Deviation and Compliance Monitoring Report: July - December 2006
Quarterly Deviation and Compliance Monitoring Report: April – June 2008
Quarterly Deviation and Compliance Monitoring Report: July – September 2008
Quarterly Deviation and Compliance Monitoring Report: January – March 2010
Quarterly Deviation and Compliance Monitoring Report: April – June 2010

Date(s)	Limit	Exceedance
07/03/06	20%, 6-min average	1 6-min average
07/07/06	20%, 6-min average	1 6-min average
10/15/06	20%, 6-min average	1 6-min average
06/06/08	20%, 6-min average	2 6-min averages
08/23/08	20%, 6-min average	1 6-min average
02/23/10	20%, 6-min average	4 6-min average
03/16/10	20%, 6-min average	1 6-min average
05/18/10	20%, 6-min average	2 6-min average

5. No. 6 Blast Furnace Casthouse Scrubber Not Operating During Cast

Regulated by: Title V Permit No. T089-6577-00316, Condition D.1.7

Sources: Quarterly Deviation and Compliance Monitoring Reports: January, 2007 – June, 2010

The No. 6 Blast Furnace Casthouse Scrubber was not operating while the blast furnace was in operation on the following dates: 1/25/07, 1/30/07, 3/27/07, 7/11/07, 7/21/07, 9/25/07,

10/19/07, 12/21/07, 1/22/08, 2/15/08, 5/13/08, 5/19/08, 9/03/08, 9/25/08, 8/14/08, 8/26/08, 9/11/09, 9/25/09, 12/02/09, 1/13/10, 1/31/10, 2/9/10, 2/10/10, 3/12/10, 4/8/10, 4/22/10, 5/5/10, 5/19/10

6. No. 7 Blast Furnace Casthouse Roof Monitor Opacity

Regulated by: Title V Permit No. T089-6577-00316, Condition D.2.3
Indiana SIP 326 IAC 6.8-3-2
Iron and Steel NESHAP, Table 1(7)

Sources: Semiannual Deviation and Compliance Monitoring Report: July - December 2006
Visible emission observations conducted by a certified inspector in accordance with the EPA Method 9, 40 C.F.R. Part 60, Appendix A
Semiannual Deviation and Compliance Monitoring Report: July - December 2008
Quarterly Deviation and Compliance Monitoring Report: January – March 2009
Quarterly Deviation and Compliance Monitoring Report: July – September 2009
Quarterly Deviation and Compliance Monitoring Report: October – December 2009
Quarterly Deviation and Compliance Monitoring Report: July – September 2010
Quarterly Deviation and Compliance Monitoring Report: Jan.- March 2011

Date(s)	Limit	Exceedance
09/29/06	15%, 6-min average 20%, 6-min average	2 6-min averages 2 6-min averages
09/06/07	15%, 6-min average	1 6-min average
09/08/07	15%, 6-min average 20%, 6-min average	1 6-min average 1 6-min average
09/11/07	15%, 6-min average 20%, 6-min average	1 6-min average 1 6-min average
10/02/08	15%, 6-min average 20%, 6-min average	1 6-min average 1 6-min average
10/17/08	15%, 6-min average	1 6-min average
10/23/08	15%, 6-min average 20%, 6-min average	126 6-min averages 126 6-min averages
11/06/08	15%, 6-min average 20%, 6-min average	36 6-min averages 36 6-min averages
11/14/08	15%, 6-min average 20%, 6-min average	1 6-min average 1 6-min average
02/27/09	15%, 6-min average 20%, 6-min average	1 6-min average 1 6-min average
03/31/09	15%, 6-min average 20%, 6-min average	3 6-min averages 3 6-min averages
07/27/09	15%, 6-min average 20%, 6-min average	2 6-min averages 2 6-min averages
11/14/09	15%, 6-min average 20%, 6-min average	1 6-min average 1 6-min average
07/01/10	15%, 6-min average 20%, 6-min average	1 6-min average 1 6-min average

7. No. 7 Blast Furnace Dust Catcher Dump Opacity

Regulated by: Title V Permit No. T089-6577-00316, Condition C.1
Indiana SIP 326 IAC 6.8-10-3(7)(D)

Sources: Visible emission observations conducted on March 25, 2007 by a certified inspector in accordance with the EPA Method 9 and Method 22, 40 C.F.R. Part 60, Appendix A
Quarterly Deviation and Compliance Monitoring Report: July, 2007 – March, 2009

Date(s)	Limit	Exceedance
03/25/07	0%	1 Up to 100%
07/07 – 09/07	0%	12 Up to 100%
10/07 – 12/07	0%	12 Up to 100%
01/08 – 03/08	0%	12 Up to 100%
04/08 – 06/08	0%	12 Up to 100%
07/08 – 09/08	0%	12 Up to 100%
10/01/08	0%	1 Up to 100%
10/07/08	0%	1 Up to 100%
10/15/08	0%	1 Up to 100%
10/26/08	0%	1 Up to 100%
10/29/08	0%	1 Up to 100%
02/25/09	0%	1 Up to 100%

8. No. 7 Blast Furnace Slag Production

Regulated by: Title V Permit No. T089-6577-00316, Condition D.2.8

Sources: Quarterly Deviation and Compliance Monitoring Reports: January, 2006 – December, 2008

ArcelorMittal exceeded its Title V operating permit Condition D.2.8 rolling annual slag production limit for Blast Furnace No. 7 of 227,472 tons per year from 2006 through October, 2008.

9. No. 2 BOF Shop Roof Monitor Opacity

Regulated by: Title V Permit No. T089-6577-00316, Condition D.5.2(f)
Indiana SIP 326 IAC 6.8-3-2
Iron and Steel NESHAP, Table 1(12)

Sources: Semiannual Deviation and Compliance Monitoring Report: July – December, 2006
Quarterly Deviation and Compliance Monitoring Report: July-Sept. 2007

Quarterly Deviation and Compliance Monitoring Report: January – March, 2008
Quarterly Deviation and Compliance Monitoring Report: April – June, 2008
Quarterly Deviation and Compliance Monitoring Report: July – September, 2009
Quarterly Deviation and Compliance Monitoring Report: October – December, 2009
Quarterly Deviation and Compliance Monitoring Report: January – March, 2010
Quarterly Deviation and Compliance Monitoring Report: July – September, 2010
Quarterly Deviation and Compliance Monitoring Report: April – June, 2010

Date(s)	Limit	Exceedance
07/06/06	20%, 3-min average	20 3-min averages
08/17/06	20%, 3-min average	1 3-min average
10/06/06	20%, 3-min average	2 3-min average
10/12/06	20%, 3-min average	4 3-min averages
11/08/06	20%, 3-min average	2 3-min averages
08/27/07	20%, 3-min average	1 3-min average
10/26/07	20%, 3-min average	1 3-min average
12/04/07	20%, 3-min average	1 3-min average
12/18/07	20%, 3-min average	3 3-min averages
01/03/08	20%, 3-min average	1 3-min average
02/09/08	20%, 3-min average	5 3-min averages
02/14/08	20%, 3-min average	2 3-min averages
03/20/08	20%, 3-min average	1 3-min average
03/30/08	20%, 3-min average	1 3-min average
04/14/08	20%, 3-min average	2 3-min averages
06/28/08	20%, 3-min average	1 3-min average
09/01/09	20%, 3-min average	1 3-min average
09/02/09	20%, 3-min average	1 3-min average
09/09/09	20%, 3-min average	1 3-min average
09/17/09	20%, 3-min average	1 3-min average
09/20/09	20%, 3-min average	1 3-min average
09/21/09	20%, 3-min average	1 3-min average
10/05/09	20%, 3-min average	1 3-min average
11/11/09	20%, 3-min average	1 3-min average
11/13/09	20%, 3-min average	1 3-min average
12/15/09	20%, 3-min average	1 3-min average
12/23/09	20%, 3-min average	2 3-min averages
01/25/10	20%, 3-min average	1 3-min average
02/12/10	20%, 3-min average	1 3-min average
03/05/10	20%, 3-min average	1 3-min average
03/12/10	20%, 3-min average	1 3-min average
05/17/10	20%, 3-min average	1 3-min average
05/29/10	20%, 3-min average	1 3-min average

Date(s)	Limit	Exceedance
06/02/10	20%, 3-min average	1 3-min average
06/03/10	20%, 3-min average	1 3-min average
07/09/10	20%, 3-min average	1 3-min average
07/12/10	20%, 3-min average	1 3-min average
07/20/10	20%, 3-min average	1 3-min average
08/07/10	20%, 3-min average	1 3-min average
08/08/10	20%, 3-min average	1 3-min average
08/23/10	20%, 3-min average	1 3-min average

10. No. 2 Basic Oxygen Furnace Secondary Vent Scrubber Stack PM Limit

Regulated by: Title V Permit No. T089-6577-00316, at Condition D.5.1(f)
Indiana SIP 326 IAC 6.8-2-17
Iron and Steel NESHAP, Table 1(9)(c)

Sources: Stack tests performed at the No. 2 BOF Secondary Vent Scrubber Stack on the following dates: August 16, 2006; September 14, 2006; November 8, 2006; January 4, 2007; and January 5, 2007

Date(s)	Limit	Exceedance
08/16/06	0.01 gr/dscf (NESHAP) 0.015 gr/dscf (SIP) 12.00 lbs/hr (SIP)	Tested concentration = 0.0232 gr/dscf Tested rate = 36.76 lbs/hr
09/14/06	0.01 gr/dscf (NESHAP) 0.015 gr/dscf (SIP) 12.00 lbs/hr (SIP)	Tested concentration = 0.0153 gr/dscf Tested rate = 23.32 lbs/hr
11/08/06	0.01 gr/dscf (NESHAP) 0.015 gr/dscf (SIP) 12.00 lbs/hr (SIP)	Tested concentration = 0.0177 gr/dscf Tested rate = 26.52 lbs/hr
01/04/07	0.01 gr/dscf (NESHAP) 0.015 gr/dscf (SIP) 12.00 lbs/hr (SIP)	Tested concentration > 0.01 gr/dscf Tested concentration > 0.015 gr/dscf Tested rate > 12.00 lbs/hr
01/05/07	0.01 gr/dscf (NESHAP) 0.015 gr/dscf (SIP) 12.00 lbs/hr (SIP)	Tested concentration > 0.01 gr/dscf Tested concentration > 0.015 gr/dscf Tested rate > 12.00 lbs/hr

11. No. 2 Basic Oxygen Furnace Primary Scrubber Stack PM Limit

Regulated by: Title V Permit No. T089-6577-00316 at Condition D.5.1(e)
Indiana SIP 326 IAC 6.9-2-17
Iron and Steel NESHAP, Table 1(9)(a)

Sources: Stack tests performed at the No. 2 BOF #20 Furnace Off-Gas Scrubber on the following dates: August 8, 2006; August 9, 2006; August 11, 2006; September 18, 2006; and September 22, 2006.
Quarterly Deviation and Compliance Monitoring Report: July – September, 2010

Date(s)	Limit	Exceedance
08/08/06	0.03 gr/dscf (NESHAP) 16.00 lbs/hr (SIP)	(1) Tested concentration = 0.0399 gr/dscf (2) Tested concentration = 0.0541 gr/dscf (1) Tested rate = 24.08 lbs/hr (2) Tested rate = 31.37 lbs/hr
08/09/06	0.03 gr/dscf (NESHAP) 16.00 lbs/hr (SIP)	(1) Tested concentration = 0.0484 gr/dscf (2) Tested concentration = 0.0432 gr/dscf (1) Tested rate = 27.21 lbs/hr (2) Tested rate = 25.00 lbs/hr
08/11/06	0.03 gr/dscf (NESHAP) 16.00 lbs/hr (SIP)	Tested concentration = 0.0444 gr/dscf Tested rate = 26.08 lbs/hr
09/18/06	0.03 gr/dscf (NESHAP) 0.058 gr/dscf (SIP) 16.00 lbs/hr (SIP)	Tested concentration = 0.0900 gr/dscf Tested rate = 50.29 lbs/hr
09/22/06	0.03 gr/dscf (NESHAP) 16.00 lbs/hr (SIP)	Tested concentration = 0.054 gr/dscf Tested rate = 32.56 lbs/hr
07/08/10	0.03 gr/dscf (NESHAP) 16.00 lbs/hr (SIP)	Exceedance reported in deviation report. Value not provided
07/12/10	0.03 gr/dscf (NESHAP) 16.00 lbs/hr (SIP)	Exceedance reported in deviation report. Value not provided

12. Hot Metal Car Opacity

Regulated by: Title V Permit No. T089-6577-00316, Condition C.1
Indiana SIP 326 IAC 6.8-10-3(6)(A)

Sources: Visible emission observations conducted on March 26, 2007 by a certified inspector in accordance with the EPA Method 9 and Method 22, 40 C.F.R. Part 60, Appendix A.

ArcelorMittal exceeded its Title V operating permit and the Indiana SIP zero percent frequency of visible emission observations during March 26, 2007 in-plant transportation of a hot metal railcar located near the No. 2 basic oxygen furnace shop desulfurization station.

13. No. 4 BOF Shop Roof Monitor Opacity

Regulated by: Title V Permit No. T089-6577-00316, Condition D.6.4(b)
Title V Permit No. T089-18491-00316, Condition D.6.2(b)
Indiana SIP 326 IAC 6.8-3-2
Iron and Steel NESHAP, Table 1(12)

Sources: Semiannual Deviation and Compliance Monitoring Report: July – December, 2006

Semiannual Deviation and Compliance Monitoring Report: July – December, 2010
Quarterly Deviation and Compliance Monitoring Report: January – March, 2011

Date(s)	Limit	Exceedance
07/13/06	20%, 3-min average	1 3-min average
09/05/06	20%, 3-min average	1 3-min average
12/20/10	20%, 3-min average	1 3-min average
01/12/11	20%, 3-min average	1 3-min average
02/24/11	20%, 3-min average	1 3-min average

IV. ENVIRONMENTAL IMPACT OF THE VIOLATIONS

Violations of the particulate matter and opacity standards increase public exposure to unhealthy particulate matter. Particulate matter, especially fine particulate, contributes to respiratory problems, lung damage and premature deaths.

10/24/11
Date

Cheryl L. Newton
Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Betty Williams, certify that I sent a Notice of Violation and Finding of Violation, No. EPA-5-11-IN-14, by Certified Mail, Return Receipt Requested, to:

James Flannery, Environmental Affairs Manager
ArcelorMittal Steel USA - Indiana Harbor East
3210 Watling Street
East Chicago, Indiana 46312

I also certify that I sent a copy of the Finding of Violation and Notice of Violation by first class mail to:

Phil Perry, Chief
Compliance and Enforcement Branch
Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, Room IGCN 1003
Indianapolis, Indiana 46204-2251

on the 26th day of October, 2011.

Betty Williams
Administrative Program Assistant
Planning and Administration Section

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7612 7969

standard bcc's: official file copy w/attachment(s)

other bcc's: Cynthia King, ORC
William MacDowell, ARD
Reza Bagherian, ARD
Brian Dickens, ARD
Daniel Schaufelberger, ARD
Monica Onyszko, ARD
Constantinos Loukeris, ARD

Creation Date:	October 13, 2011
Filename:	ArcelorMittal Steel IH East NOV-FOV
Legend:	ARD:AECAB:AECAS(MI/WI):DSCHAUFE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

OCT 21 2011

REPLY TO THE ATTENTION OF

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

James Flannery
Environmental Manager
ArcelorMittal USA Inc. – Indiana Harbor West
3001 Dickey Road
East Chicago, Indiana 46312

Dear Mr. Flannery:

This is to advise you that the U.S. Environmental Protection Agency (EPA) has determined that the ArcelorMittal USA Inc. (ArcelorMittal) – Indiana Harbor West facility (IHW Facility) located at 3001 Dickey Road in East Chicago, Indiana is in violation of the Clean Air Act (the CAA) and associated state pollution control requirements.

The EPA is sending this Notice of Violation and Finding of Violation (NOV/FOV) to notify you that at the IHW Facility we have identified violations of the facility's Title V Permit, the National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities at 40 C.F.R. Part 63, Subpart FFFFF and the Indiana State – Implementation Plan.

Section 113 of the CAA gives us several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action and bringing a judicial criminal action. The option we select, in part, depends on the efforts taken by ArcelorMittal to correct the alleged violations and the timeframe in which you can demonstrate and maintain continuous compliance with the requirements cited in the NOV/FOV.

Before we determine which enforcement option is appropriate, we are offering you the opportunity to request a conference with us about the violations alleged in the NOV/FOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

The EPA contact in this matter is Monica Onyszko. You may call her at 312-353-5139 if you wish to request a conference. Legal questions should be directed to Cynthia A. King, Associate Regional Counsel, at 312-886-6831. The EPA hopes that this NOV/FOV will encourage ArcelorMittal's compliance with the requirements of the CAA.

Sincerely,

Cheryl L. Newton
Director
Air and Radiation Division

Enclosure

cc: Phil Perry, Chief
Compliance and Enforcement Branch
Office of Air Quality
Indiana Department of Environmental Management

United States Environmental Protection Agency
Region 5

IN THE MATTER OF:	)	
	)	
ArcelorMittal USA Inc. –	)	**NOTICE OF VIOLATION AND**
Indiana Harbor West	)	**FINDING OF VIOLATION**
East Chicago, Indiana	)	
	)	**EPA-5-11-IN-10**
Proceedings Pursuant to	)	
the Clean Air Act,	)	
42 U.S.C. §§ 7401 et seq.	)	

NOTICE AND FINDING OF VIOLATION

ArcelorMittal USA Inc. (ArcelorMittal) owns and operates an iron and steel manufacturing facility located at 3001 Dickey Road in East Chicago, Indiana (IHW Facility).

The United States Environmental Protection Agency (EPA) is sending this Notice of Violation and Finding of Violation (NOV/FOV) pursuant to Sections 113(a)(1) and (3) of the Clean Air Act (the CAA), 42 U.S.C. § 7413(a)(1) and (3), to notify ArcelorMittal that at the IHW Facility we have identified violations of the facility's Title V Permit, the National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities (Iron and Steel NESHAP) at 40 C.F.R. Part 63, Subpart FFFFF and the Indiana State Implementation Plan (SIP).

I. REGULATORY PROVISIONS

The permits and regulatory provisions relevant to this NOV/FOV are as follows:

Title V

a. Title V of the CAA, 42 U.S.C. §§ 7661a-7661f, establishes an operating permit program for certain sources, including "major sources." Pursuant to Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), on July 21, 1992, 57 Fed. Reg. 32295, the EPA promulgated regulations establishing the minimum elements of a permit program to be administered by any air pollution control agency. These regulations are codified at 40 C.F.R. Part 70.

b. 40 C.F.R. § 70.2 defines "major source," in part, as any stationary source belonging to a single major industrial grouping and that directly emits or has the potential to emit 100 tons per year (tpy) of any air pollutant, as defined under Section 302 of the CAA, 42 U.S.C. § 7602.

c. 40 C.F.R. § 70.7(b) states that no source subject to Title V may operate the source except in compliance with a Title V permit.

d. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), states that after the effective date of any permit program approved or promulgated under Title V of the CAA, no source subject to Title V may operate the source except in compliance with its Title V permit.

e. The EPA promulgated final interim approval of the Indiana Title V program on November 14, 1995, 60 Fed. Reg. 57191, and the program became effective on that date.

f. The regulation at 40 C.F.R. § 70.6(b)(1) specifies that all terms and conditions in a permit issued under a Part 70 program, including any provisions designed to limit a source's potential to emit, are enforceable by the EPA under the CAA.

g. The EPA approved 326 IAC 2-7-5, governing Title V permit content, effective December 14, 1995, 60 Fed. Reg. 57188, as part of the Indiana SIP.

   i. 326 IAC 2-7-5(1) provides that Title V permits shall incorporate emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of a Part 70 permit issuance.

h. The EPA approved 326 IAC 2-7-6, governing compliance requirements, effective December 14, 1995, 60 Fed. Reg. 57188, as part of the Indiana SIP.

   i. 326 IAC 2-7-6(1) provides that Title V permits issued under this rule shall contain requirements with respect to compliance certification, testing, monitoring, reporting and record keeping sufficient to assure compliance with the terms and conditions of a Part 70 permit consistent with Section 5(3) of this rule.

   ii. 326 IAC 2-7-6(6) provides that Title V permits issued under this rule shall be subject to provisions as may be required by the commissioner.

   iii. 326 IAC 2-7-10.5(a)(3) provides that (a) An owner or operator of a Part 70 source proposing to (3) otherwise modify the source as described in this section shall submit a request for a modification approval in accordance with this section.

i. The IHW Facility is subject to Title V Permit, No. T089-7099-00318, issued by the Indiana Department of Environmental Management (IDEM) on December 7, 2004. Additionally, during the duration of time under investigation in this document, the IHW Facility has also operated under a/an:

i. Administrative Amendment, No. 089-21088-00318 (issued July 19, 2005);

ii. Minor Permit Modification, No. 089-20921-00318 (issued September 8, 2005);

iii. Minor Source Modification, No. 089-23099-00318 (issued July 27, 2006);

iv. Minor Permit Modification, No. 089-23361-00318 (issued September 22, 2006);

v. Minor Source Modification, No. 089-23926-00318 (issued March 8, 2007);

vi. First Significant Permit Modification, No. 089-24076-00318 (issued on May 4, 2007);

vii. Administrative Amendment, No. 089-26376-00318 (issued on May 16, 2008);

viii. Significant Source Modification, No. 089-26477-00318 (issued on November 17, 2008);

ix. Significant Permit Modification, No. 089-26506-00318 (issued on December 5, 2008);

x. Minor Permit Modification, No. 089-27280-00318 (issued March 24, 2009);

xi. Minor Source Modification, No. 089-29339-00318 (issued July 6, 2010)

xii. Significant Permit Modification, No. 089-29300-00318 (issued on September 8, 2010); and

xiii. Administrative Amendment, No. 089-29863-00318 (issued on December 10, 2010).

j. The following provisions are found in the IHW Facility's Title V permit:

i. Condition B.20 - A modification, construction or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5;

ii. Condition C.1(a) - Pursuant to 326 IAC 5-1-2, opacity shall not exceed an average of twenty percent (20%) in any one six-minute averaging period as determined in 326 IAC 5-1-4;

iii. Condition C.6 - Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation;

iv. Condition D.1.2(d) - The Permittee shall meet each emission limitation in 40 C.F.R. § 63.7790 that applies to the No. 3 Blast Furnace Casthouse Roof Monitor and No. 4 Blast Furnace Casthouse Roof Monitor;

v. Condition D.1.2(e) - The Permittee shall meet each operation and maintenance requirement in 40 C.F.R. § 63.7800 that applies to the No. 3 Blast Furnace Casthouse and No. 4 Blast Furnace Casthouse and required capture and control equipment;

vi. Condition D.1.9(d)(2) - In order to minimize particulate matter (PM) emissions to comply with D.1.4: The iron and slag runners shall be equipped with covers and natural gas fired lances placed in appropriate areas at the No. 4 Blast Furnace for fume suppression during the cast;

vii. Condition D.1.9(d)(3) - In order to minimize PM emissions to comply with D.1.4: The iron and slag runner covers can be removed during a cast for required maintenance/malfunction and shall be promptly returned in position;

viii. Condition D.1.10(a) - Visible emission notations of the No. 4 Blast Furnace Casthouse Baghouse shall be performed once per day during normal daylight operations when exhausting to the atmosphere;

ix. Condition D.2.2(e) - The Permittee shall meet each operation and maintenance requirement in 40 C.F.R. § 63.7800 that applies to the Sinter Plant and required capture and control equipment;

x. Condition D.2.3(a) - Total suspended particulate (TSP) emissions from the Sinter Plant Windbox exhausting to stack shall not exceed 0.02 grains per dry standard cubic foot (gr/dscf) of exhaust air and 49.70 pounds per hour (lbs/hour);

xi. Condition D.2.3(b) - TSP emissions from the Sinter Plant discharge (breaker) exhausting to stack shall not exceed 0.02 gr/dscf of exhaust air and 18.05 lbs/hour;

xii. Condition D.2.4 - Pursuant to 326 IAC 7-4-1.1(c)(14)(C), sulfur dioxide (SO_2) emissions from the Sinter Plant Windbox shall not exceed 1.0 pound of SO_2 per ton of process material and 240 pounds of SO_2 per hour;

xiii. Condition D.2.7(e) - The Permittee shall demonstrate continuous compliance with the emissions limitations of the NESHAP for Integrated Iron and Steel Manufacturing Facilities that apply to the Sinter Plant and required capture and control equipment in accordance with 40 C.F.R. § 63.7833;

xiv. Condition D.2.12(a) - Following procedures in 326 IAC 8-13-5, at least one Sinter Plant Windbox gas volatile organic compound (VOC) emissions monitoring sample must be analyzed during three designated periods of an operating day;

xv. Condition D.3.2(b) - The Permittee shall meet the emission limitation in 40 C.F.R. § 63.7790 that applies to the roof monitor;

xvi. Condition D.3.12 - The reladle/desulfurization baghouse, the ladle metallurgical facility (LMF) baghouse, the main electrostatic precipitator (ESP), the carbon monoxide scrubber and flare shall be in operation at all times when associated processes are in operation;

xvii. Condition D.3.20(a) - The significant permit modification application shall be consistent with 326 IAC 2-7-12, etc.;

xviii. Condition D.3.5(b) - The opacity limits for basic oxygen furnace (BOF) operations found in this section shall be complied with and shall take precedence over those in 326 IAC 5-1-2 with which they conflict. Visible emissions from the BOF main ESP stack shall not exceed 20% opacity for a six-minute average;

xix. Condition D.3.5(c) - The opacity limits for BOF operations found in this section shall be complied with and shall take precedence over those in 326 IAC 5-1-2 with which they conflict. Visible emissions from the BOF roof monitor shall not exceed 20% opacity for a three-minute average; and

xx. Condition D.8.4(a)(1) - All parts of the gasoline dispensing facility vapor collection and control system which can be visually inspected must be checked daily by the operator of the facility for malfunctions.

xxi. Condition B.9, and previously Condition B.8 of the IHW Facility's Title V permit, require that ArcelorMittal submit compliance monitoring reports which are certified to be true, accurate and complete.

Iron and Steel NESHAP

The IHW Facility is subject to the Iron and Steel NESHAP, 40 C.F.R. Part 63, Subpart FFFFF.

The following requirements are found in the Iron and Steel NESHAP:

a. 40 C.F.R. § 63.7790(a) - You must meet each emission limit and opacity limit in Table 1 to this subpart that applies to you;

b. 40 C.F.R. § 63.7800(b) - You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in § 63.7790(b);

c. 40 C.F.R. § 63.7833(a) - You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in 40 C.F.R. § 63.7790(a) by meeting the requirements in Table 3 to this subpart; and

Table 1 of the Iron and Steel NESHAP – For . . .

i. (7) Each casthouse at an existing blast furnace (b) You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the casthouse or structure housing the blast furnace that exhibit opacity greater than 20% (six-minute average) and

ii. (12) Each roof monitoring at an existing BOF shop, you must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the BOF shop or any other building housing the BOF or BOF shop operation that exhibit opacity greater than 20% (three-minute average).

d. Table 3 of the Iron and Steel NESHAP - For (1) each windbox exhaust stream at an existing sinter plant, you must demonstrate continuous compliance by (a) maintaining emissions of particulate matter at or below 0.4 lbs/ton of product sinter.

Indiana SIP

a. The EPA approved 326 IAC 2-7-12, governing permit modification, effective December 14, 1995, 60 Fed. Reg. 57188, as part of the Indiana SIP.

b. The EPA approved 326 IAC 5-1-2, governing visible emissions, effective June 16, 1997, 62 Fed. Reg. 18521, as part of the Indiana SIP.

i. 326 IAC 5-1-2(2)(B) provides that visible emissions from a facility located in Lake County shall not exceed an average of 20% opacity in twenty-four consecutive readings unless otherwise specified in 326 IAC 6-1-10.1. This visible emission limit shall supersede the visible emissions limit contained in clause (A).

c. The EPA approved 326 IAC 6.8, governing particulate matter, effective May 22, 2006, 71 Fed. Reg. 14383, as part of the Indiana SIP.

i. 326 IAC 6.8-2-21 provides that the facility's Sinter Plant Discharge Stack shall not exceed 0.02 gr/dscf. The facility's Sinter Plant Windbox Stack shall not exceed 49.70 lbs/hour.

ii. 326 IAC 6.8-3-3 provides that the facility's BOF Main Stack shall not exceed 20% opacity for a six-minute average. The BOF Roof Monitor shall not exceed 20% opacity for a six-minute average.

d. According to Condition D.2.4 of its Title V permit, ArcelorMittal is subject to 326 IAC 7-4-1.1(c)(14)(C). On April 8, 2005, supplemented on July 6, 2005, Indiana requested a SIP revision for the control of SO_2 emissions in Lake County, Indiana. The EPA approved the SIP revision, 326 IAC 7-4.1-(01-21), effective October 26, 2005, 70 Fed. Reg. 56129. The new rule, 326 IAC 7–4.1, replaces 326 IAC 7–4–1.1, which was repealed.

i. 326 IAC 7-4.1-10(3) provides that the facility Sinter Plant Windbox must meet a 240 lbs/hour SO_2 emission limit.

e. The EPA approved 326 IAC 8-4-6, governing gasoline dispensing facilities, effective January 3, 2000, 64 Fed. Reg. 59642, as part of the Indiana SIP.

i. 326 IAC 8-4-6(f)(4)(A) provides that all parts of the vapor collection and control system which can be visually inspected must be checked daily by the operator of the facility for malfunctions.

f. The EPA approved 326 IAC 8-13-6, governing control measure operation, maintenance and monitoring, effective September 5, 2000, 65 Fed. Reg. 41350, as part of the Indiana SIP.

i. 326 IAC 8-13-6(c)(1) provides that following procedures in 326 IAC 8-13-5, at least one sinter plant sample must be analyzed during three designated periods of an operating day.

Section 113(a)(1)-(3) of the CAA, 42 U.S.C. § 7413(a)(1)-(3), authorizes the Administrator to initiate an enforcement action whenever, on the basis of any available information, the Administrator finds that any person has violated or is in violation of a requirement or prohibition of, among others, any implementation plan or permit, Title I or Title V of the CAA, or any rule promulgated, issued or approved under Title I or Title V of the CAA.

II. BASIS FOR VIOLATIONS

The violations alleged in this NOV/FOV are based on the following:

a. Quarterly Deviation and Compliance Monitoring Report: December 7 - 31, 2004;

b. Quarterly Deviation and Compliance Monitoring Report: January - March 2005;

c. Quarterly Deviation and Compliance Monitoring Report: April - June 2005;

d. Quarterly Deviation and Compliance Monitoring Report: July - September 2005;

e. Quarterly Deviation and Compliance Monitoring Report: October - December 2005;

f. Quarterly Deviation and Compliance Monitoring Report: January - March 2006;

g. Quarterly Deviation and Compliance Monitoring Report: April - June 2006;

h. Quarterly Deviation and Compliance Monitoring Report: July - September 2006;

i. Quarterly Deviation and Compliance Monitoring Report: October - December 2006;

j. Quarterly Deviation and Compliance Monitoring Report: January - March 2007;

k. Quarterly Deviation and Compliance Monitoring Report: April - June 2007;

l. Quarterly Deviation and Compliance Monitoring Report: July - September 2007;

m. Quarterly Deviation and Compliance Monitoring Report: October - December 2007;

n. Quarterly Deviation and Compliance Monitoring Report: January - March 2008;

o. Quarterly Deviation and Compliance Monitoring Report: April - June 2008;

p. Quarterly Deviation and Compliance Monitoring Report: July - September 2008;

q. Quarterly Deviation and Compliance Monitoring Report: October - December 2008;

r. Quarterly Deviation and Compliance Monitoring Report: January - March 2009;

s. Quarterly Deviation and Compliance Monitoring Report: April - June 2009;

t. Quarterly Deviation and Compliance Monitoring Report: July - September 2009;

u. Quarterly Deviation and Compliance Monitoring Report: October - December 2009;

v. Quarterly Deviation and Compliance Monitoring Report: January - March 2010;

w. Quarterly Deviation and Compliance Monitoring Report: April - June 2010;

x. Quarterly Deviation and Compliance Monitoring Report: July - September 2010;

y. Quarterly Deviation and Compliance Monitoring Report: October - December 2010;

z. Quarterly Deviation and Compliance Monitoring Report: January - March 2011;

aa. Semiannual Deviation and Compliance Monitoring Report: May 22 - June 30, 2006;

bb. Semiannual Deviation and Compliance Monitoring Report: July 1 - December 31, 2006;

cc. Semiannual Deviation and Compliance Monitoring Report: January 1 - June 30, 2007;

dd. Semiannual Deviation and Compliance Monitoring Report: July 1 - December 31, 2007;

ee. Semiannual Deviation and Compliance Monitoring Report: January 1 - June 30, 2008;

ff. Semiannual Deviation and Compliance Monitoring Report: July 1 - December 31, 2008;

gg. Semiannual Deviation and Compliance Monitoring Report: January 1 - June 30, 2009;

hh. Semiannual Deviation and Compliance Monitoring Report: July 1 - December 31, 2009;

ii. Semiannual Deviation and Compliance Monitoring Report: January 1 - June 30, 2010;

jj. Semiannual Deviation and Compliance Monitoring Report: July 1 - December 31, 2010;

kk. BOF Precipitator Opacity Monitor – Excess Emissions Report: October - December 2004;

ll. BOF Precipitator Opacity Monitor – Excess Emissions Report: January - March 2005;

mm. BOF Precipitator Opacity Monitor – Excess Emissions Report: April - June 2005;

nn. BOF Precipitator Opacity Monitor – Excess Emissions Report: July - September 2005;

oo. BOF Precipitator Opacity Monitor – Excess Emissions Report: October - December 2006;

pp. BOF Precipitator Opacity Monitor – Excess Emissions Report: January - March 2006;

qq. BOF Precipitator Opacity Monitor – Excess Emissions Report: April - June 2006;

rr. BOF Precipitator Opacity Monitor – Excess Emissions Report: July - September 2006;

ss. BOF Precipitator Opacity Monitor – Excess Emissions Report: October - December 2006;

tt. BOF Precipitator Opacity Monitor – Excess Emissions Report: January - March 2007;

uu. BOF Precipitator Opacity Monitor – Excess Emissions Report: April - June 2007;

vv. BOF Precipitator Opacity Monitor – Excess Emissions Report: July - September 2007;

ww. BOF Precipitator Opacity Monitor – Excess Emissions Report: October - December 2007;

xx. BOF Precipitator Opacity Monitor – Excess Emissions Report: January - March 2008;

yy. BOF Precipitator Opacity Monitor – Excess Emissions Report: April - June 2008;

zz. BOF Precipitator Opacity Monitor – Excess Emissions Report: July - September 2008;

aaa. BOF Precipitator Opacity Monitor – Excess Emissions Report: October - December 2008;

bbb. BOF Precipitator Opacity Monitor – Excess Emissions Report: January - March 2009;

ccc. BOF Precipitator Opacity Monitor – Excess Emissions Report: April - June 2009;

ddd. BOF Precipitator Opacity Monitor – Excess Emissions Report: July - September 2009;

eee. BOF Precipitator Opacity Monitor – Excess Emissions Report: October - December 2009;

fff. BOF Precipitator Opacity Monitor – Excess Emissions Report: January - March 2010;

ggg. BOF Precipitator Opacity Monitor – Excess Emissions Report: April - June 2010;

hhh. BOF Precipitator Opacity Monitor – Excess Emissions Report: July - September 2010;

iii. BOF Precipitator Opacity Monitor – Excess Emissions Report: October - December 2010;

jjj. BOF Precipitator Opacity Monitor – Excess Emissions Report: January - March 2011;

kkk. Stack Test performed on Sinter Plant Windbox – April 24, 2007;

lll. September 10, 2007 certified letter from IDEM to ArcelorMittal informing them of failure to apply for a proper permit for a pneumatic conveyance system used for lime injection into a LMF and the associated permit application;

mmm. Observations from an inspection conducted by the EPA at the IHW Facility on November 29, 2006; and

nnn. Visible emission observations from the roof monitors of the BOF Shop and Nos. 3 and 4 Blast Furnaces that were conducted by a certified inspector in accordance with the EPA Method 9, 40 C.F.R. Part 60, Appendix A.

III. EXPLANATION OF VIOLATIONS

The EPA found the following violations at the ArcelorMittal IHW Facility:

a. Sinter Plant PM at Discharge Stack

Regulated by: Title V Permit, Condition D.2.3(b)
Indiana SIP 326 IAC 6.8-2-21

Source(s): 2aa

Date(s)	Limit	Exceedance
08/01/06	0.02 gr/dscf	Degree Unknown

b. Sinter Plant PM at Windbox Stack

Regulated by: Title V Permit, Condition D.2.3(a)
Indiana SIP 326 IAC 6.8-2-21

Source(s): 2i, 2k, 2l, 2o, 2bb, 2dd, 2jjj

Date(s)	Limit	Exceedance
08/03/06	49.70 lbs/hour	59.17 lbs/hour
10/27/06	49.70 lbs/hour	51.12 lbs/hour
04/24/07	49.70 lbs/hour	65.28 lbs/hour
06/26/07	49.70 lbs/hour	63.71 lbs/hour
08/23/07	49.70 lbs/hour	56.79 lbs/hour
06/10/08*	49.70 lbs/hour	Degree Unknown
06/10/08*	49.70 lbs/hour	51.07 lbs/hour

NOTE: * - Diagnostic tests performed caused exceedances in two of four runs.

c. Sinter Plant PM at Windbox Stack

Regulated by: Title V Permit, Condition D.2.7(e)
Iron and Steel NESHAP, Tables 1 and 3

Source(s): 2k, 2dd, 2jjj

Date(s)	Limit	Exceedance
04/24/07	0.4 lbs/ton	0.48 lbs/ton
06/26/07	0.4 lbs/ton	0.53 lbs/ton
01/15/08*	0.4 lbs/ton	0.46 lbs/ton
01/15/08*	0.4 lbs/ton	0.46 lbs/ton
01/15/08*	0.4 lbs/ton	0.46 lbs/ton
06/10/08*	0.4 lbs/ton	Degree Unknown
06/10/08*	0.4 lbs/ton	0.41 lbs/ton

NOTE: * - Exceedances occurred during diagnostic tests.

d. Sinter Plant SO_2 at Windbox Stack

Regulated by: Title V D.2.4
Indiana SIP 326 IAC 7-4.1-10(3)

Source(s): 2h, 2l

Date(s)	Limit	Exceedance
09/29/06	240 lbs/hour	256.4 lbs/hour
07/24/07	240 lbs/hour	361.7 lbs/hour

e. Sinter Plant O&M Plan Deviation

Regulated by: Title V Permit, Condition D.2.2(e)
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Source(s): 2n

Deviations reported for minimum scrubber fan amp reading:

Dates: 07/01/06 to 07/03/06
Shorter periods of deviations also reported.

f. Sinter Plant Windbox VOC Emissions Monitoring

Regulated by: Title V Permit, Condition D.2.12(a)
Indiana SIP 326 IAC 8-13-5

Source(s): 2b, 2c, 2d, 2e, 2f, 2g, 2h, 2i, 2j, 2k, 2l, 2m, 2n, 2o, 2p, 2z, 2aa, 2bb, 2cc, 2ee

Failed to analyze one sample during each of three operating periods of an operating day:

Dates: 02/02/05, 02/10/05, 02/16/05, 02/22/05, 03/31/05, 04/05/05, 09/08/05, 12/16/05, 12/22/05, 12/28/05, 02/07/06, 05/25/06, 06/02/06, 06/22/06, 07/21/06, 08/16/06, 10/25/06, 12/15/06, 02/04/07, 04/26/07, 05/06/07, 05/16/07, 05/23/07, 06/28/07, 08/26/07, 09/14/07, 09/26/07, 10/28/07, 11/18/07, 12/05/07, 01/29/08, 02/07/08, 03/08/08, 03/14/08, 04/09/08, 04/12/08, 04/30/08, 05/27/08, 05/31/08, 06/04/08, 06/08/08, 06/22/08, 06/27/08, 07/05/08, 07/21/08, 07/23/08, 08/26/08

g. No. 3 Blast Furnace Opacity at Roof Monitor

Regulated by: Title V Permit, Condition C.1(a)
Title V Permit, Condition D.1.2(d)
Indiana SIP 326 IAC 5-1-2(2)(B)
Iron and Steel NESHAP, Tables 1 and 3

Source(s): 2h, 2l, 2m, 2n, 2o, 2p, 2q, 2cc, 2dd, 2ee, 2mmm

Date(s)	Limit	Exceedance
07/31/06	20%, 6-min average	69%, 6-min average (6 mins = 0.1 hours)
08/03/06	20%, 6-min average	2 6-min averages (12 mins = 0.2 hours)
09/12/07	20%, 6-min average	26.5%, 6-min average Read by contractor (6 mins = 0.1 hours)
09/12/07	20%, 6-min average	21.9%, 6-min average Read by contractor (6 mins = 0.1 hours)
09/12/07	20%, 6-min average	22.3%, 6-min average Read by contractor (6 mins = 0.1 hours)
09/12/07	20%, 6-min average	21.3%, 6-min average Read by contractor (6 mins = 0.1 hours)
09/13/07	20%, 6-min average	23.3%, 6-min average (6 mins = 0.1 hours)
09/13/07	20%, 6-min average	24.6%, 6-min average (6 mins = 0.1 hours)
09/13/07	20%, 6-min average	32.9%, 6-min average Read by contractor (6 mins = 0.1 hours)
09/13/07	20%, 6-min average	30.6%, 6-min average Read by contractor (6 mins = 0.1 hours)
09/19/07	20%, 6-min average	22.5%, 6-min average (6 mins = 0.1 hours)
09/19/07	20%, 6-min average	20.8%, 6-min average Read by contractor (6 mins = 0.1 hours)
09/19/07	20%, 6-min average	20.4%, 6-min average Read by contractor (6 mins = 0.1 hours)
09/19/07	20%, 6-min average	20.2%, 6-min average Read by contractor (6 mins = 0.1 hours)
09/19/07	20%, 6-min average	24.4%, 6-min average Read by contractor (6 mins = 0.1 hours)

Date(s)	Limit	Exceedance
09/19/07	20%, 6-min average	23.5%, 6-min average Read by contractor (6 mins = 0.1 hours)
09/19/07	20%, 6-min average	35.4%, 6-min average Read by contractor (6 mins = 0.1 hours)
11/01/07	20%, 6-min average	2 6-min averages* (12 mins = 0.2 hours)
03/19/08	20%, 6-min average	1 6-min average (6 mins = 0.1 hours)
04/10/08	20%, 6-min average	1? 6-min average* (6 mins = 0.1 hours)
04/25/08	20%, 6-min average	? 6-min averages* (Duration: 4:00 - 19:00)
06/20 - 06/25/2008	20%, 6-min average	? 6-min averages* (Duration: 13:00 - ?)
07/12/08	20%, 6-min average	1 6-min average* (6 mins = 0.1 hours)
08/03/08	20%, 6-min average	1 6-min average* (6 mins = 0.1 hours)
08/03/08	20%, 6-min average	1 6-min average* (6 mins = 0.1 hours)
08/04 - 08/05/08	20%, 6-min average	? 6-min averages* (Duration: 12:38 - 14:45)
11/09/08	20%, 6-min average	1 6-min average (6 mins = 0.1 hours)
11/09/08	20%, 6-min average	1 6-min average (6 mins = 0.1 hours)

NOTE: * - ArcelorMittal did not do Method 9, but reports that given the circumstances, opacity may have been violated and is approximated.

h. No. 4 Blast Furnace Opacity at Roof Monitor

Regulated by: Title V Permit, Condition C.1(a)
Title V Permit, Condition D.1.2(d)
Indiana SIP 326 IAC 5-1-2(2)(B)
Iron and Steel NESHAP, Tables 1 and 3

Source(s): 2c, 2g, 2j, 2l, 2m, 2n, 2o, 2p, 2x, 2z, 2bb, 2cc, 2dd, 2ee, 2jj, 2mmm

Date(s)	Limit	Exceedance
06/21/05	20%, 6-min average	Degree Unknown
06/30/05	20%, 6-min average	Degree Unknown
06/09/06	20%, 6-min average	30%, 6-min average (6 mins = 0.1 hours)
06/12/06	20%, 6-min average	22.5%, 6-min average (6 mins = 0.1 hours)
02/23/07	20%, 6-min average	Degree Unknown, (15 mins = 0.25 hours)
09/05/07	20%, 6-min average	24.6%, 6-min average Read by contractor (6 mins = 0.1 hours)

Date(s)	Limit	Exceedance
09/20/07	20%, 6-min average	26.0%, 6-min average (6 mins = 0.1 hours)
09/20/07	20%, 6-min average	22.9%, 6-min average Read by contractor (6 mins = 0.1 hours)
09/20/07	20%, 6-min average	24.6%, 6-min average Read by contractor (6 mins = 0.1 hours)
09/25/07	20%, 6-min average	25.6%, 6-min average (6 mins = 0.1 hours)
09/25/07	20%, 6-min average	21.9%, 6-min average (6 mins = 0.1 hours)
09/25/07	20%, 6-min average	22.5%, 6-min average Read by contractor (6 mins = 0.1 hours)
09/25/07	20%, 6-min average	40.2%, 6-min average Read by contractor (6 mins = 0.1 hours)
09/25/07	20%, 6-min average	44.2%, 6-min average Read by contractor (6 mins = 0.1 hours)
09/25/07	20%, 6-min average	22.1%, 6-min average Read by contractor (6 mins = 0.1 hours)
09/25/07	20%, 6-min average	20.6%, 6-min average Read by contractor (6 mins = 0.1 hours)
10/10/07	20%, 6-min average	2 6-min averages* (12 mins = 0.2 hours)
10/13/07	20%, 6-min average	2 6-min averages* (12 mins = 0.2 hours)
12/10/07	20%, 6-min average	2 6-min averages* (12 mins = 0.2 hours)
01/09/08	20%, 6-min average	22.9%, 6-min average Read by contractor (6 mins = 0.1 hours)
01/24/08	20%, 6-min average	1 6-min average* (6 mins = 0.1 hours)
04/09/08	20%, 6-min average	1 6-min average (6 mins = 0.1 hours)
04/18/08	20%, 6-min average	1 6-min average (6 mins = 0.1 hours)
04/30/08	20%, 6-min average	1 6-min average (6 mins = 0.1 hours)
05/22/08	20%, 6-min average	1 6-min average (6 mins = 0.1 hours)
06/12/08	20%, 6-min average	1 6-min average (6 mins = 0.1 hours)
06/12/08	20%, 6-min average	1 6-min average (6 mins = 0.1 hours)
06/12/08	20%, 6-min average	1 6-min average (6 mins = 0.1 hours)
06/19/08	20%, 6-min average	1 6-min average (6 mins = 0.1 hours)

Date(s)	Limit	Exceedance
07/26/08	20%, 6-min average	1 6-min average* (6 mins = 0.1 hours)
08/05/08	20%, 6-min average	1 6-min average* (6 mins = 0.1 hours)
08/11/08	20%, 6-min average	1 6-min average* (6 mins = 0.1 hours)
09/10/08	20%, 6-min average	1 6-min average* (6 mins = 0.1 hours)
09/29/08	20%, 6-min average	1 6-min average* (6 mins = 0.1 hours)
11/20/08	20%, 6-min average	? 6-min averages*
09/17/10	20%, 6-min average	2 6-min averages* (6 mins = 0.2 hours) (occurred at the backdraft stack)
12/29/10	20%, 6-min average	3 6-min averages* (18 mins = 0.3 hours)

NOTE: * - ArcelorMittal did not do Method 9 readings, but reported that given the circumstances, opacity may have been violated and is approximated.

i. No. 4 Blast Furnace VE Notations at Casthouse Baghouse

Regulated by: Title V Permit, Condition D.1.10(a) /D.1.16(c)
Indiana SIP 326 IAC 2-7-6

Source(s): 2i, 2l, 2m, 2n, 2z

Failed to perform VE notations once per day:

Dates: 10/27/06, 11/21/06, 12/10/06, 12/16/06, 07/11/07, 07/12/07, 08/31/07, 09/19/07, 10/24/07, 11/19/07, 11/28/07, 12/17/07, 01/29/08, 02/03/11

j. No. 4 Blast Furnace O&M Plan Deviation

Regulated by: Title V Permit, Condition D.1.2(e)
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Source(s): 2n, 2o, 2ii

Deviations reported for minimum baghouse fan amp reading:

Dates: 07/15/06 to 07/16/06 (Baghouse Fan No. 2), 07/17/06 to 07/18/06 (Baghouse Fan No. 2), 02/13/07 to 02/14/07 (Baghouse Fan No. 1), 04/16/10, 06/02/10 (Baghouse Fans Nos. 1 and 2) Shorter periods of deviations also reported.

k. Uncovered Iron and Slag Runners in Nos. 3 and 4 Blast Furnaces

Regulated by: Title V Permit, Condition D.1.9(d)(2) and (3)
Title V Permit, Condition C.6
326 IAC 2-7-6(6)

Source(s): 2o, 2p, 2q, 2dd, 2ee, 2mmm

Failed to operate control equipment at all times that the emission units vented to the control equipment are in operation:

ArcelorMittal reported deviations at its No. 3 Blast Furnace on: 01/27/08, 06/26/08, 07/29 - 07/31/08, 08/01/08, 08/04/08 and 08/15/08.

During a November, 29, 2006 inspection, an EPA inspector observed that there were sections of iron and slag runners, each approximately ten feet in length, which were uncovered at No. 4 Blast Furnace.

ArcelorMittal reported additional deviations at No. 4 Blast Furnace on: 02/06/08, 02/07/08, 02/29/08, 03/03/08, 03/14/08, 05/11/08, 05/17/08, 07/29/08, 9/22 - 09/23/08, 09/25 - 09/30/08, 10/01 - 10/03/08, 10/03 - 10/06/08, 10/08 - 10/22/08 and 11/08/08.

l. BOF Opacity at Roof Monitor

Regulated by: Title V Permit, Condition D.3.2(b)
Title V Permit, Conditions D.3.5(c)/D.3.6(c)
Indiana SIP 326 IAC 6.8-3-3 (repealed May 30, 2008)
Indiana SIP 326 IAC 6-1-10.1 (repealed May 22, 2006)
Indiana SIP 326 IAC 6.8-2-21 (effective May 30 2008)
Iron and Steel NESHAP, Tables 1 and 3

Source(s): 2c, 2e, 2g, 2l, 2m, 2n, 2o, 2p, 2r, 2s, 2w, 2x, 2z, 2cc, 2dd, 2ee, 2ff, 2jj, 2mmm

Date(s)	Limit	Exceedance
05/24/05	20%, 3-min average	Degree Unknown
12/31/05	20%, 3-min average	Degree Unknown
06/06/06	20%, 3-min average	30%, 3-min average (3 mins = 0.05 hours)
09/05/07	20%, 3-min average	26.3%, 3-min average Read by contractor (3 mins = 0.05 hours)
09/24/07	20%, 3-min average	30.0%, 3-min average Read by contractor (3 mins = 0.05 hours)

Date(s)	Limit	Exceedance
09/24/07	20%, 3-min average	33.3%, 3-min average Read by contractor (3 mins = 0.05 hours)
09/24/07	20%, 3-min average	26.3%, 3-min average Read by contractor (3 mins = 0.05 hours)
09/24/07	20%, 3-min average	31.7%, 3-min average Read by contractor (3 mins = 0.05 hours)
09/24/07	20%, 3-min average	32.1%, 3-min average Read by contractor (3 mins = 0.05 hours)
09/26/07	20%, 3-min average	26.7%, 3-min average Read by contractor (3 mins = 0.05 hours)
09/26/07	20%, 3-min average	30.0%, 3-min average Read by contractor (3 mins = 0.05 hours)
09/26/07	20%, 3-min average	37.5%, 3-min average Read by contractor (3 mins = 0.05 hours)
09/26/07	20%, 3-min average	27.5%, 3-min average Read by contractor (3 mins = 0.05 hours)
09/26/07	20%, 3-min average	25.0%, 3-min average Read by contractor (3 mins = 0.05 hours)
12/06/07	20%, 3-min average	26.3%, 3-min average Read by contractor (3 mins = 0.05 hours)
12/06/07	20%, 3-min average	34.2%, 3-min average Read by contractor (3 mins = 0.05 hours)
12/06/07	20%, 3-min average	28.3%, 3-min average Read by contractor (3 mins = 0.05 hours)
12/06/07	20%, 3-min average	26.7%, 3-min average Read by contractor (3 mins = 0.05 hours)
12/06/07	20%, 3-min average	33.3%, 3-min average Read by contractor (3 mins = 0.05 hours)
12/06/07	20%, 3-min average	20.8%, 3-min average Read by contractor (3 mins = 0.05 hours)
12/06/07	20%, 3-min average	42.9%, 3-min average Read by contractor (3 mins = 0.05 hours)
12/06/07	20%, 3-min average	36.3%, 3-min average Read by contractor (3 mins = 0.05 hours)
12/06/07	20%, 3-min average	21.3%, 3-min average Read by contractor (3 mins = 0.05 hours)

Date(s)	Limit	Exceedance
12/06/07	20%, 3-min average	39.2%, 3-min average Read by contractor (3 mins = 0.05 hours)
12/14/07	20%, 3-min average	1 3-min average* (3 mins = 0.05 hours)
12/14/07	20%, 3-min average	1 3-min average* (3 mins = 0.05 hours)
03/31/08	20%, 3-min average	Duration: 00:00 to 6:30
05/02/08	20%, 3-min average	? 3-min averages*
07/28/08	20%, 3-min average	? 3-min averages*
08/21/08	20%, 3-min average	? 3-min averages*
02/13/09	20%, 3-min average	1 3-min average* (3 mins = 0.05 hours)
02/16/09	20%, 3-min average	1? 3-min averages* (3 mins = 0.05 hours)
02/20/09	20%, 3-min average	1? 3-min averages* (3 mins = 0.05 hours)
02/25/09	20%, 3-min average	1? 3-min averages* (3 mins = 0.05 hours) (Duration: 12:40 - 12:40)
02/25/09	20%, 3-min average	1? 3-min averages* (3 mins = 0.05 hours) (Duration: 12:50 - 12:50)
03/13/09	20%, 3-min average	1 3-min average* (3 mins = 0.05 hours)
03/24/09	20%, 3-min average	1 3-min average* (3 mins = 0.05 hours)
03/25/09	20%, 3-min average	1 3-min average* (3 mins = 0.05 hours)
04/24/09	20%, 3-min average	2 3-min averages* (6 mins = 0.1 hours)
04/29/09	20%, 3-min average	2 3-min averages* (6 mins = 0.1 hours)
05/14/10	20%, 3-min average	3 3-min averages* (9 mins = 0.15 hours)
08/06/10	20%, 3-min average	1 3-min average* (3 mins = 0.05 hours)
08/12/10	20%, 3-min average	2 3-min average* (6 mins = 0.1 hours)
08/13/10	20%, 3-min average	6 3-min average* (18 mins = 0.3 hours)
08/23/10	20%, 3-min average	2 3-min average* (6 mins = 0.1 hours)
08/24/10	20%, 3-min average	2 3-min average* (6 mins = 0.1 hours)
09/13/10	20%, 3-min average	8 3-min average* (24 mins = 0.1 hours)

NOTE: * - ArcelorMittal did not do Method 9 readings, but reported that given the circumstances, opacity may have been violated and is approximated.

m. BOF Opacity at ESP Stack

Regulated by: Title V Permit, Conditions D.3.5(b)/D.3.6(b)
Indiana SIP 326 IAC 6.8-3-3 (repealed May 30, 2008)
Indiana SIP 326 IAC 6-1-10.1 (repealed May 22, 2006)
Indiana SIP 326 IAC 6.8-2-21 (effective May 30, 2008)

Source(s): 2a, 2b, 2c, 2d, 2e, 2f, 2g, 2h, 2i, 2j, 2k, 2l, 2m, 2n, 2o, 2p, 2q, 2r, 2s, 2v, 2w, 2y, 2ii, 2jj, 2kk, 2ll, 2mm, 2nn, 2oo, 2pp, 2qq, 2rr, 2ss, 2tt, 2uu, 2vv, 2ww, 2xx, 2yy, 2zz, 2aaa, 2bbb, 2fff, 2ggg, 2iii

Date(s)	Limit	Exceedance
4Q 2004	20%, 6-min average	38 6-min averages (228 mins = 3.8 hours)
1Q 2005	20%, 6-min average	292 6-min averages (1,752 mins = 29.2 hours)
2Q 2005	20%, 6-min average	36 6-min averages (216 mins = 3.6 hours)
3Q 2005	20%, 6-min average	19 6-min averages (114 mins = 1.9 hours)
4Q 2005	20%, 6-min average	132 6-min averages (792 mins = 13.2 hours)
1Q 2006	20%, 6-min average	125 6-min averages (750 mins = 12.5 hours)
2Q 2006	20%, 6-min average	33 6-min averages (198 mins = 3.3 hours)
3Q 2006	20%, 6-min average	6 6-min averages (36 mins = 0.6 hours)
4Q 2006	20%, 6-min average	20 6-min averages (120 mins = 2 hours)
1Q 2007	20%, 6-min average	20 6-min averages (120 mins = 2 hours)
2Q 2007	20%, 6-min average	4 6-min averages (24 mins = 0.4 hours)
3Q 2007	20%, 6-min average	4 6-min averages (24 mins = 0.4 hours)
4Q 2007	20%, 6-min average	43 6-min averages (258 mins = 4.3 hours)
1Q 2008	20%, 6-min average	181 6-min averages (1,086 mins = 18.1 hours)
2Q 2008	20%, 6-min average	19 6-min averages (114 mins = 1.9 hours)
3Q 2008	20%, 6-min average	26 6-min averages (156 mins = 2.6 hours)
4Q 2008	20%, 6-min average	25 6-min averages (150 mins = 2.5 hours)
1Q 2009	20%, 6-min average	27 6-min averages (162 mins = 2.7 hours)
2Q 2009	20%, 6-min average	100% compliance (BOF was not idle)
1Q 2010	20%, 6-min average	4 6-min averages (24 mins = 0.4 hours)

Date(s)	Limit	Exceedance
2Q 2010	20%, 6-min average	100% compliance (BOF was not idle)
4Q 2010	20%, 6-min average	5 6-min averages (30 mins = 0.5 hours)

n. Failure to Operate Pollution Control Equipment During Operation of BOF Vessel

Regulated by: Title V Permit, Condition C.6
326 IAC 2-7-6(6)

Source(s): 2mmm

Failed to operate control equipment at all times that the emission units vented to the control equipment are in operation:

During a November, 29, 2006 inspection, an EPA inspector observed that during tapping in the BOF Shop, the primary emission control device was not on.

o. Gasoline Dispensing Facility Visual Inspections

Regulated by: Title V Permit, Condition D.8.4(1)
Indiana SIP 326 IAC 8-4-6(e)(4)

Source(s): 2f, 2h

Failed to check system for malfunctions:

Dates: 10/01/05 to 12/31/05, 07/01/06 to 09/30/06

p. Improper Permitting of Pneumatic Conveyance System Used for Lime Injection into LMF

Regulated by: Title V Permit, Condition B.20
Title V Permit, Condition D.3.20(a)
326 IAC 2-7-10.5
326 IAC 2-7-12

Source(s): 2ff; 2006 Permit Application

Failed to submit a permit application prior to construction of the LMF lime silo storage and handling system

q. Failure to Operate Pollution Control Equipment During Operation of Associated Processes (Reladle/Desulfurization Baghouse)

Regulated by: Title V Permit, Condition D.3.12
326 IAC 2-7-6(6)

Source(s): 2k

The Reladle/Desulfurization Baghouse shall be in operation at all times when associated processes are in operation. ArcelorMittal reported that on June 29, 2007, the North Reladle/ Desulfurization Baghouse fan was shutdown.

IV. ENVIRONMENTAL IMPACT OF VIOLATIONS

a. Violation of the opacity standards increases public exposure to unhealthy particulate matter. Particulate matter, especially fine particulate, contributes to respiratory problems, lung damage and premature deaths.

b. Ground level concentrations of SO_2 contribute to respiratory illness, particularly in children and the elderly and aggravate existing heart and lung diseases. Peak levels of SO_2 in the ambient air can cause temporary breathing difficulty for people with asthma who are active outdoors. Longer-term exposures to high levels of SO_2 gas and particles cause respiratory illness and aggravate existing heart disease.

c. VOCs react with nitrogen oxides in the presence of sunlight to form ground-level ozone, which contributes to respiratory problems such as increased susceptibility to respiratory infection, pulmonary inflammation, painful deep breathing, aggravated asthma and reduced lung capacity.

d. Violations of the monitoring, recordkeeping, reporting and permitting requirements prevent the EPA from knowing whether an affected facility has maintained compliance with the applicable emission standards.

10/21/11
Date

Cheryl L. Newton
Director
Air and Radiation Division

CERTIFICATION OF MAILING

I Betty Williams, certify that I sent a Notice of Violation and Finding of Violation, No. EPA-5-11-IN-10, by Certified Mail, Return Receipt Requested, to:

James Flannery, Environmental Manager
ArcelorMittal USA Inc. - Indiana Harbor West
3001 Dickey Road
East Chicago, Indiana 46312

I also certify that I sent a copy of the Notice of Violation and Finding of Violation, No. EPA-5-11-IN-10, by first class mail to:

Phil Perry, Chief
Compliance and Enforcement Branch
Office of Air Quality
Indiana Department Environmental Management
100 North Senate Avenue
MC 61-53, IGCN 1003
Indianapolis, Indiana 46206-2251

On the 26 day of October 2011.

Betty Williams
Administrative Professional Assistant
Planning and Administration Section

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7172 1952

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

OCT 21 2011

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Richard M. Zavoda
Environmental Manager
ArcelorMittal Cleveland Inc.
3060 Eggers Avenue
Cleveland, Ohio 44105

Dear Mr. Zavoda:

This is to advise you that the United States Environmental Protection Agency (EPA) has determined that the ArcelorMittal Cleveland Inc. (ArcelorMittal) located at 3060 Eggers Avenue in Cleveland, Ohio, (Cleveland Facility) is in violation of the Clean Air Act (the CAA) and associated state pollution control requirements.

The EPA is sending this Notice of Violation and Finding of Violation (NOV/FOV) to notify you that at the Cleveland Facility we have identified violations of the facility's Title V Permit, the National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities at 40 C.F.R. Part 63, Subpart FFFFF, and the Ohio State Implementation Plan.

Section 113 of the CAA gives the EPA several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action and bringing a judicial criminal action. The option we select, in part, depends on the efforts taken by ArcelorMittal to correct the alleged violations and the timeframe in which you can demonstrate and maintain continuous compliance with the requirements cited in the NOV/FOV.

Before we determine which enforcement option is appropriate, we are offering you the opportunity to request a conference with us about the violations alleged in the NOV/FOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

The EPA contacts in this matter are Brian Dickens and Monica Onyszko. You may contact either Mr. Dickens at 312-886-6073 or Ms. Onyszko at 312-353-5139 if you wish to request a conference. Legal questions should be directed to Cynthia A. King, Associate Regional Counsel, at 312-886-6831. The EPA hopes that this NOV/FOV will encourage ArcelorMittal's compliance with the requirements of the CAA.

Sincerely,

Cheryl L. Newton
Director
Air and Radiation Division

Enclosure

cc: George P. Baker, Chief
Cleveland Department of Public Health & Welfare

United States Environmental Protection Agency
Region 5

IN THE MATTER OF:	)	
	)	
ArcelorMittal Cleveland Inc. Cleveland, Ohio	)	**NOTICE OF VIOLATION AND FINDING OF VIOLATION**
	)	
Proceedings Pursuant to the Clean Air Act, 42 U.S.C. §§ 7401 et seq.	)	**EPA-5-12-OH-01**

NOTICE AND FINDING OF VIOLATION

ArcelorMittal Cleveland Inc. (ArcelorMittal) owns and operates an integrated steel mill at 3060 Eggers Avenue, Cleveland, Ohio (Cleveland Facility).

The EPA is sending this Notice of Violation and Finding of Violation (NOV/FOV) pursuant to Sections 113(a)(1) and (3) of the Clean Air Act (the CAA), 42 U.S.C. § 7413(a)(1) and (3), to notify ArcelorMittal that we have found violations at the Cleveland Facility of the facility's Title V Permit, the National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities at 40 C.F.R. Part 63, Subpart FFFFF (Iron and Steel NESHAP), and the Ohio State Implementation Plan (SIP) requirements.

I. REGULATORY PROVISIONS

The permits and regulatory provisions relevant to this NOV/FOV are as follows:

Title V

a. Title V of the CAA, 42 U.S.C. §§ 7661a-7661f, establishes an operating permit program for certain sources, including "major sources." Pursuant to Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), on July 21, 1992, 57 Fed. Reg. 32295, the EPA promulgated regulations establishing the minimum elements of a permit program to be administered by any air pollution control agency. These regulations are codified at 40 C.F.R. Part 70.

b. 40 C.F.R. § 70.2 defines "major source," in part, as any stationary source belonging to a single major industrial grouping and that directly emits or has the potential to emit 100 tons per year (tpy) of any air pollutant, as defined under Section 302 of the CAA, 42 U.S.C. § 7602.

c. 40 C.F.R. § 70.7(b) states that no source subject to Title V may operate the source except in compliance with a Title V permit.

d. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), states that after the effective date of any permit program approved or promulgated under Title V of the CAA, no source subject to Title V may operate the source except in compliance with its Title V permit.

e. The EPA approved Ohio's Part 70 program, codified at Ohio Administrative Code (OAC) Rule 3745-77, on August 15, 1995, 60 Fed. Reg. 42045, with an effective date of October 1, 1995.

f. The regulation at 40 C.F.R. § 70.6(b)(1) specifies that all terms and conditions in a permit issued under a Part 70 program, including any provisions designed to limit a source's potential to emit, are enforceable by the EPA under the CAA.

g. On August 15, 1995, 60 Fed. Reg. 42045, the EPA approved OAC 3745-77-07 which requires that each Title V Permit shall include all emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements.

h. On November 5, 2004, the Ohio Environmental Protection Agency (OEPA) issued Final Title V Permit No. 13-18-00-1613 to ISG Cleveland Inc., ArcelorMittal's predecessor.

i. On May 27, 1994, 59 Fed. Reg. 27464, the EPA approved OAC Rule 3745-17 as part of the federally enforceable SIP for the State of Ohio. OAC Rule 3745-17 regulates the emission of particulate matter from stationary sources.

j. Part III of the Title V Permit sets forth the terms and conditions for the emission units at the Cleveland Facility.

k. Part III.A.I.1 of the Title V Permit for Emission Units P903, P904, P925, P926, F011, F029, and P267, among others, prohibits in accordance with OAC 3745-17-07(A)(1), visible particulate emissions from any stack in excess of 20 percent opacity as a six-minute average for more than six consecutive minutes in any sixty minutes.

l. Part III.A.I.1. of the Title V Permit for Emission Units P903, P904, P925, P926, F011, F029, and P267, among others, prohibits, in accordance with OAC 3745-17-07(B)(1), visible particulate emissions from any fugitive dust source in excess of 20 percent opacity as a three-minute average.

m. Part III.A.I.1. of the Title V Permit for Emission Unit P903, among others, requires, under OAC 3745-17-08(B)(3), the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust.

n. Part III.A.2.2.a.i. of the Title V permit for Emissions Units P903 and P904 requires that ArcelorMittal shall minimize or eliminate visible emissions of fugitive dust through the employment of reasonably available control measures including, but not limited to the use of a Passive Emission Control system.

Iron and Steel NESHAP

a. The Cleveland facility is subject to the Iron and Steel NESHAP, 40 C.F.R. Part 63, Subpart FFFFF.

b. The following requirements are found in the Iron and Steel NESHAP:

i. 40 C.F.R. § 63.7790(a) - You must meet each emission limit and opacity limit in Table 1 to this subpart that applies to you;

ii. 40 C.F.R. § 63.7800(a) - You must at all times operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart;

iii. 40 C.F.R. § 63.7800(b) - You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in § 63.7790(b);

iv. 40 C.F.R. § 63.7833(a) - You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in 40 C.F.R. § 63.7790(a) by meeting the requirements in Table 3 to this subpart (which specifies opacity limits associated with certain equipment); and

v. 40 C.F.R. § 63.7842 requires that sources must document and maintain records of certain information related to its equipment, including startups, shutdowns and malfunctions of that equipment.

Ohio SIP

a. On May 27, 1994, 59 Fed. Reg. 27464, the EPA approved OAC Rule 3745-17 as part of the federally enforceable SIP for the State of Ohio. OAC Rule 3745-17 regulates the emission of particulate matter from stationary sources.

b. OAC 3745-17-07(A)(1) prohibits visible particulate emissions from any stack in excess of 20 percent opacity as a six minute average.. Opacity may exceed 20 percent, but not more than 60 percent, as a six minute average once in any sixty minute period.

c. OAC 3745-17-07(B)(1) prohibits visible particulate emissions from any fugitive dust source in excess of 20 percent opacity as a three minute average.

d. OAC 3745-17-08(B)(3) requires the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust.

e. As required by Part I.A.1c.iv. of the Cleveland Facility's Title V permit, ArcelorMittal must submit compliance monitoring reports which are certified to be true, accurate and complete.

f. Section 113(a)(1)-(3) of the CAA, 42 U.S.C. § 7413(a)(1)-(3), authorizes the Administrator to initiate an enforcement action whenever, on the basis of any available information, the Administrator finds that any person has violated or is in violation of a requirement or prohibition of, among others, any implementation plan or permit, Title I or Title V of the CAA, or any rule promulgated, issued or approved under Title I or Title V of the CAA.

II. BASIS FOR VIOLATIONS

The violations alleged in this NOV/FOV are based on the EPA's review of the following:

a. Quarterly Deviation and Compliance Monitoring Report: First Quarter 2007;

b. Quarterly Deviation and Compliance Monitoring Report: Second Quarter 2007;

c. Quarterly Deviation and Compliance Monitoring Report: Third Quarter 2007;

d. Quarterly Deviation and Compliance Monitoring Report: Fourth Quarter 2007;

e. Quarterly Deviation and Compliance Monitoring Report: First Quarter 2008;

f. Quarterly Deviation and Compliance Monitoring Report: Second Quarter 2008;

g. Quarterly Deviation and Compliance Monitoring Report: Third Quarter 2008;

h. Quarterly Deviation and Compliance Monitoring Report: Fourth Quarter 2008;

i. Quarterly Deviation and Compliance Monitoring Report: First Quarter 2009;

j. Quarterly Deviation and Compliance Monitoring Report: Second Quarter 2009;

k. Quarterly Deviation and Compliance Monitoring Report: Third Quarter 2009;

l. Quarterly Deviation and Compliance Monitoring Report: Fourth Quarter 2009;

m. Quarterly Deviation and Compliance Monitoring Report: First Quarter 2010;

n. Quarterly Deviation and Compliance Monitoring Report: Second Quarter 2010;

o. First Half 2007 Iron and Steel MACT/NESHAP Semiannual Report;

p. Second Half 2007 Iron and Steel MACT/NESHAP Semiannual Report;

q. First Half 2008 Iron and Steel MACT/NESHAP Semiannual Report;

r. First Half 2009 Iron and Steel MACT/NESHAP Semiannual Report;

s. Second Half 2009 Iron and Steel MACT/NESHAP Semiannual Report;

t. First Half 2010 Iron and Steel MACT/NESHAP Semiannual Report;

u. August 13, 2009 Boiler D malfunction notice;

v. August 24, 2009 Boiler D malfunction notice;

w. September 14, 2009 No. 1 BOF malfunction notice;

x. September 16, 2009 No. 1 BOF malfunction notice;

y. September 22, 2009 Boiler D malfunction notice;

z. November 5, 2009 No. 1 BOF Shop Hot Metal Reladle Station malfunction notice;

aa. November 23, 2009 No. 1 BOF Shop Hot Metal Reladle Station malfunction notice;

bb. February 2, 2010 No. 1 BOF malfunction notice; and

cc. March 3, 2010 No. 1 BOF malfunction notice.

III. EXPLANATION OF VIOLATIONS

The EPA found the following violations at the ArcelorMittal Cleveland Facility:

a. #1 BOF Shop (P905/P906) Excess Opacity at Roof Monitor and Operation and Maintenance Plan Deviation (Operation without Controls)

Regulated by: Title V Permit, Part III.A.I.1
Iron and Steel NESHAP, 40 C.F.R. § 63.7790(a), Tables 1 and 3
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

OAC Rule 3745-17-07(B)

Sources: Quarterly Deviation and Compliance Monitoring Report: Second Quarter 2007
First Half 2007 Iron and Steel NESHAP Semiannual Report
Quarterly Deviation and Compliance Monitoring Report: First Quarter 2010
Iron and Steel NESHAP Semiannual Report: First Half 2010
March 3, 2010 No. 1 BOF malfunction notice

Reported By	Date (Start and Stop)	Exceedance
ISG Cleveland	May 16, 2007	21.7%
	ISG Cleveland reported that poor quality scrap caused excess emissions.	
ArcelorMittal	February 24, 2010 – 12:16 February 24, 2010 – 12:20	NA
	Hot metal was transferred to a steel ladle within the BOF building for one heat without the benefit of baghouse draft.	

b. #1 BOF Shop Hot Metal Transfer (F011) Operation and Maintenance Plan Deviation (Operation without Controls)

Regulated by: Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)
Title V Permit, Part III.A.I.1

Sources: Iron and Steel NESHAP Semiannual Report: First Half 2007
Iron and Steel NESHAP Semiannual Report: Second Half 2009
November 5, 2009 No. 1 BOF Shop Hot Metal Reladle Station malfunction notice
November 23, 2009 No. 1 BOF Shop Hot Metal Reladle Station malfunction notice

Reported By	Date (Start and Stop)	
ISG Cleveland	April 18, 2007	
	ISG Cleveland reported it performed hot metal transfer without a control. ISG Cleveland claimed that the exceedance was caused by malfunction, but the same equipment failure occurred on March 29, 2007 and was evidently not repaired.	
ArcelorMittal	November 3, 2009 – 09:00 November 3, 2009 – 10:30	

Reported By	Date (Start and Stop)	
	A hot metal transfer car cable within the reladle system failed and prevented the use of the normal hot metal transfer location. Hot metal was transferred without the use of the baghouse control device.	
ArcelorMittal	November 20, 2009 – 10:52 November 20, 2009 – 12:00	
	A hot metal transfer occurred without the use of the baghouse pollution control device.	

c. #1 BOF (F011) Hot Metal Transfer Baghouse Excess Opacity via COMS

Regulated by: Title V Permit, Section III.A.I.1
OAC Rule 3745-17-07(A)

Sources: Quarterly Deviation and Compliance Monitoring Report: Third Quarter 2007
Quarterly Deviation and Compliance Monitoring Report: Third Quarter 2009
Quarterly Deviation and Compliance Monitoring Report: First Quarter 2010
September 14, 2009 No. 1 BOF malfunction notice
September 16, 2009 No. 1 BOF malfunction notice
February 2, 2010 No. 1 BOF malfunction notice

Reported By	Date	Start Time	Duration	Opacity	Cause
ISG Cleveland	July 19, 2007	09:36	6 minutes	33%	Bag leaks
ISG Cleveland	September 15, 2007	05:00	6 minutes	27%	Bag leaks
ISG Cleveland	September 16, 2007	01:42	6 minutes	30%	Bag leaks
ISG Cleveland	September 16, 2007	03:12	6 minutes	24%	Bag leaks
ArcelorMittal	September 4, 2009	13:24	6 minutes	34.7%	No. 2 and No. 3 baghouse fans were restarted after being inactive for more than a few months

Reported By	Date	Start Time	Duration	Opacity	Cause
ArcelorMittal	September 14, 2009	10:48	6 minutes	23.8%	No. 1 and No. 4 baghouse fans were restarted after being inactive for more than a few months
ArcelorMittal	January 24, 2010	08:48	6 minutes	42.9%	Accumulated baghouse material inadvertently flowed through an inspection port and became re-entrained in the baghouse fan ductwork
ArcelorMittal	January 24, 2010	08:54	6 minutes	27.2%	Accumulated baghouse material inadvertently flowed through an inspection port and became re-entrained in the baghouse fan ductwork

d. #1 BOF Shop (F011) Hot Metal Transfer Baghouse Failure to Meet Draft Static Pressure Hourly Average Minimum

Regulated by: Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Sources: Iron and Steel NESHAP Semiannual Report: First Half 2007
Iron and Steel NESHAP Semiannual Report: Second Half 2007
Iron and Steel NESHAP Semiannual Report: First Half 2008
Iron and Steel NESHAP Semiannual Report: Second Half 2009
Iron and Steel NESHAP Semiannual Report: First Half 2010

Reported By	Date	Duration
ISG Cleveland	January - June 2007	>50 hours
ISG Cleveland	July 9 - October 13, 2007	20 hours
ArcelorMittal	January 6 – June 29, 2008	>50 hours
ArcelorMittal	October 1 – December 31, 2009	38 hours
ArcelorMittal	January 1 – June 13, 2010	25 hours

e. #2 BOF Shop (P925/P926) Excess Opacity at Roof Monitor

Regulated by: Iron and Steel NESHAP, 40 C.F.R. § 63.7790(a), Tables 1 and 3
Title V Permit, Part III.A.I.1
OAC Rule 3745-17-07(B)

Source: Quarterly Deviation and Compliance Monitoring Report: Second Quarter 2007

Reported By	Date	Exceedance
ISG Cleveland	June 26, 2007	21.3%

f. #2 BOF Shop (P925/P926) North and South Stack Electrostatic Precipitator Excess Opacity via Continuous Opacity Monitoring Systems (COMS)

Regulated by: Title V Permit, Part III.A.I.1
OAC Rule 3745-17-07(A)

Sources: Quarterly Deviation and Compliance Monitoring Report: Second Quarter 2007
Quarterly Deviation and Compliance Monitoring Report: Third Quarter 2007
Quarterly Deviation and Compliance Monitoring Report: Fourth Quarter 2007
Quarterly Deviation and Compliance Monitoring Report: First Quarter 2008
Quarterly Deviation and Compliance Monitoring Report: Third Quarter 2008

North Stack

Reported By	Date	Start Time	Duration	Opacity	Cause
ISG Cleveland	April 14, 2007	06:30	6 minutes	38.6%	First start of ID fan with no draft
ISG Cleveland	April 14, 2007	14:36	6 minutes	21.1%	First start of ID fan with no draft
ISG Cleveland	April 16, 2007	05:30	6 minutes	20.1%	Testing draft 95 furnace
ISG Cleveland	December 21, 2007	18:54	6 minutes	51%	Startup 10 fan pre production startup
ISG Cleveland	December 23, 2007	08:54	6 minutes	26%	Testing draft pre production startup
ArcelorMittal	January 30, 2008	08:48	6 minutes	23%	Process startup
ArcelorMittal	February 21, 2008	13:12	6 minutes	22%	Inadequate sprays

Reported By	Date	Start Time	Duration	Opacity	Cause
ArcelorMittal	March 8, 2008	07:12	6 minutes	22%	Unknown
ArcelorMittal	March 11, 2008	14:48	6 minutes	24%	Unknown
ArcelorMittal	March 17, 2008	05:36	6 minutes	22%	Unknown
ArcelorMittal	March 17, 2008	15:12	6 minutes	22%	Unknown
ArcelorMittal	March 25, 2008	10:04	6 minutes	25%	9 ID fan shut down

South Stack

Reported By	Date	Start Time	Duration	Opacity	Cause
ISG Cleveland	April 14, 2007	06:30	6 minutes	94.7%	First start of ID fan with no draft
ISG Cleveland	April 14, 2007	06:36	6 minutes	63.7%	First start of ID fan with no draft
ISG Cleveland	April 16, 2007	05:30	6 minutes	25.1%	Testing draft 95 furnace
ISG Cleveland	May 31, 2007	09:18	6 minutes	78.8%	PM service and testing ID fan
ArcelorMittal	February 19, 2008	14:48	6 minutes	23%	Unknown
ArcelorMittal	July 16, 2008	18:54	6 minutes	31%	Cleaning #6 fan, all fields on and BOF not operating
ArcelorMittal	August 28, 2008	04:24	6 minutes	23%	Unknown

g. C5 (P903) Blast Furnace Casthouse Operation without Controls

Regulated by: Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)
Title V Permit, Part III.A.I.1, Part III.A.2.2.a
OAC Rule 3745-17-08(B)

Sources: Iron and Steel NESHAP Semiannual Report: First Half 2007
Iron and Steel NESHAP Semiannual Report: First Half 2008

Reported By	Date (Start and Stop)	
ISG Cleveland	June 20, 2007	
	ISG Cleveland reported it had cast the furnace without the trough hood in place, which is not in accordance	

	with its operations and maintenance plan.	
ArcelorMittal	March 7, 2008 – 20:38 March 7, 2008 – 22:15	
	Casting occurred without the use of a trough cover for part of one cast due to a power outage caused by an electrical ground failure of the monorail hoist trolley system that is used to lower the trough cover into position.	
ArcelorMittal	March 22, 2008 – 12:40 March 22, 2008 – 14:40	
	Casting occurred without the use of a trough cover for one cast due to a mechanical failure of the trough of the monorail hoist trolley system cable used to lower the trough cover.	

h. C6 (P904) Blast Furnace Casthouse Operation without Controls

Regulated by: Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)
Title V Permit, Part III.A.I.1, Part III.A.2.2.a
OAC 3745-17-08(B)

Sources: Iron and Steel NESHAP Semiannual Report: Second Half 2007
Iron and Steel NESHAP Semiannual Report: First Half 2008

Reported By	Date (Start and Stop)	
ISG Cleveland	September 16, 2007	
	ISG Cleveland reported it had cast the furnace without the trough cover in place, which is not in accordance with its operations and maintenance plan.	
ArcelorMittal	March 22, 2008 – 13:15 March 22, 2008 – 13:20	
	A bottlecar containing molten iron experienced a breakout at approximately 13:15. Iron from the bottlecar spilled onto the ground.	
ArcelorMittal	June 10, 2008 – 18:10 June 10, 2008 – 18:20	
	A bottlecar containing molten iron experienced a breakout at approximately 18:10. Iron from the bottlecar spilled onto the ground.	

i. Boiler D (B004) Excess Opacity via COMS

Regulated by: Title V Permit, Part III.A.I.1
OAC Rule 3745-17-07(A)

Source(s): Quarterly Deviation and Compliance Monitoring Report: Third Quarter 2009
August 13, 2009 Boiler D malfunction notice
August 24, 2009 Boiler D malfunction notice
September 22, 2009 Boiler D malfunction notice

Reported By	Date	Start Time	Duration	Opacity	
ArcelorMittal	08/12/09	09:06	6 minutes	21.7%	Reported malfunction
ArcelorMittal	08/12/09	09:12	6 minutes	21.4%	Reported malfunction
ArcelorMittal	08/12/09	10:48	6 minutes	28.0%	Reported malfunction
ArcelorMittal	08/15/09	15:48	6 minutes	37.2%	Soot blowing
ArcelorMittal	08/15/10	15:54	6 minutes	41.8%	Fields tripped, adjusted electrical load
ArcelorMittal	08/16/09	01:36	6 minutes	22.8%	Soot blowing
ArcelorMittal	08/17/09	15:54	6 minutes	24.6%	Soot blowing
ArcelorMittal	08/17/09	16:00	6 minutes	37.0%	Soot blowing
ArcelorMittal	08/20/09	02:24	6 minutes	22.7%	Soot blowing
ArcelorMittal	08/20/09	21:18	6 minutes	77.6%	Reported malfunction
ArcelorMittal	09/18/09	06:48	6 minutes	45.9%	Reported malfunction
ArcelorMittal	09/18/09	06:54	6 minutes	86.9%	Reported malfunction
ArcelorMittal	09/18/09	07:00	6 minutes	46.3%	Reported malfunction
ArcelorMittal	09/19/09	04:48	6 minutes	89.7%	Adjusted fuel/air ratio
ArcelorMittal	09/21/09	15:36	6 minutes	62.0%	#4 field tripped, power restored
ArcelorMittal	09/21/09	19:42	6 minutes	34.2%	Adjusting fans, adjusted fuel/air ratio
ArcelorMittal	09/21/09	19:48	6 minutes	21.6%	Adjusted fuel/air ratio

Reported By	Date	Start Time	Duration	Opacity	
ArcelorMittal	09/21/09	20:06	6 minutes	22.9%	#4 field tripped, power restored; [boiler idles on 09/22, conducted internal precipitator inspection, repaired wires]

j. #2 Ladle Metallurgy Facility (P267) Operating and Inspection Requirements

Regulated by: Iron and Steel NESHAP, 40 C.F.R. § 63.7842
Title V Permit, Part III.A.I.1

Source: Iron and Steel NESHAP Semiannual Report: First Half 2007

Reported By	Date	Count
ISG Cleveland	April 16 - June 26, 2007	21 days Failed to document operations at the LMF including failing to record pressure drops and information relating to startups, shutdowns and malfunctions

IV. ENVIRONMENTAL IMPACT OF THE VIOLATIONS

a. Violation of the opacity standards increases public exposure to unhealthy particulate matter. Particulate matter, especially fine particulate, contributes to respiratory problems, lung damage and premature deaths.

b. Ground level concentrations of SO_2 contribute to respiratory illness, particularly in children and the elderly and aggravate existing heart and lung diseases. Peak levels of SO_2 in the ambient air can cause temporary breathing difficulty for people with asthma who are active outdoors. Longer-term exposures to high levels of SO_2 gas and particles cause respiratory illness and aggravate existing heart disease.

c. Volatile organic compounds (VOCs) react with nitrogen oxides in the presence of sunlight to form ground-level ozone, which contributes to respiratory problems such as increased susceptibility to respiratory infection, pulmonary inflammation, painful deep breathing, aggravated asthma and reduced lung capacity.

d. Violations of the monitoring, recordkeeping, reporting and permitting requirements prevent the EPA from knowing whether a facility has maintained compliance with the applicable regulatory and emission standards.

10/21/11
Date

Cheryl L. Newton
Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Betty Williams, certify that I sent the Notice of Violation and Finding of Violation by Certified Mail, Return Receipt Requested, to:

Richard M. Zavoda, Environmental Manager
ArcelorMittal Cleveland Inc.
3060 Eggers Avenue
Cleveland, OH 44105

I also certify that I sent a copy of the Notice of Violation and Finding of Violation by First Class Mail to:

George P. Baker
Chief of Air Pollution Enforcement
Department of Public Health & Welfare
Division of Air Quality
75 Erieview Plaza, 2nd Floor
Cleveland, Ohio 44114

on the 26th day of October 2011.

Betty Williams
Administrative Program Assistant
Planning and Administration Section

Certified Mail Receipt Number: 7009 1680 0000 7672 8249

standard bcc's: official file copy w/attachment(s)

other bcc's:

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APPENDIX C

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAR 2 1 2019

REPLY TO THE ATTENTION OF

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Wendell Carter
Vice President
ArcelorMittal USA LLC
3210 Watling Street
East Chicago, Indiana 46312

RE: ArcelorMittal USA LLC Indiana Harbor East Notice of Violation and Finding of Violation

Dear Mr. Carter:

This is to advise you that the U.S. Environmental Protection Agency (EPA) has determined that the ArcelorMittal USA LLC (ArcelorMittal) Indiana Harbor East facility located at 3210 Watling Street, East Chicago, Indiana (IHE Facility), is in violation of the Clean Air Act (the CAA) and associated state pollution control requirements.

The EPA is sending this Notice of Violation and Finding of Violation (NOV/FOV) to notify you that at the IHE Facility we have identified violations of the facility's Title V permit, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 C.F.R. Part 63, Subpart DDDDD, the NESHAP for Iron and Steel Manufacturing Facilities at 40 C.F.R. Part 63, Subpart FFFFF, the NESHAP for Steel Pickling-HCL Processing Facilities and Hydrochloric Acid Regeneration Plants at 40 C.F.R. Part 63, Subpart CCC, the NESHAP for Lime Manufacturing, 40 C.F.R. Part 63, Subpart AAAAA, and the Indiana State Implementation Plan.

Section 113 of the CAA gives us several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action, and bringing a judicial criminal action. The option we select depends in part on the efforts taken by ArcelorMittal to correct the alleged violations and the timeframe in which you can demonstrate and maintain continuous compliance with the requirements cited in the NOV/FOV.

Before we determine which enforcement option is appropriate, we are offering you the opportunity to request a conference with us about the violations alleged in the NOV/FOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference. The EPA contact in

this matter is Daniel Schaufelberger. You may call him at (312) 886-6814, if you wish to request a conference. Legal questions should be directed to Cynthia A. King, Associate Regional Counsel, at 312-886-6831. The EPA hopes that this NOV/FOV will encourage ArcelorMittal's compliance with the requirements of the CAA.

Sincerely,

Edward Nam
Director
Air and Radiation Division

Enclosure

cc: Phil Perry, Indiana Department of Environmental Management

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	
	)	
ArcelorMittal USA LLC East Chicago, Indiana	)	**NOTICE OF VIOLATION AND FINDING OF VIOLATION**
	)	
Proceedings Pursuant to the Clean Air Act, 42 U.S.C. §§ 7401 et seq.	)	**EPA-5-19-IN-02**
	)	
	)	

NOTICE AND FINDING OF VIOLATION

ArcelorMittal USA LLC (ArcelorMittal) owns and operates the Indiana Harbor East facility, an iron and steel manufacturing facility located at 3210 Watling Street, East Chicago, Indiana (IHE Facility).

The U.S. Environmental Protection Agency (EPA) is sending this Notice of Violation and Finding of Violation (NOV/FOV) to ArcelorMittal pursuant to Sections 113(a)(1) and (3) of the Clean Air Act (CAA), 42 U.S.C. § 7413(a)(1) and (3), to notify ArcelorMittal that at the IHE Facility we have identified violations of the facility's Title V permit, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (Boiler NESHAP), 40 C.F.R. Part 63, Subpart DDDDD, the NESHAP for Iron and Steel Manufacturing Facilities at 40 C.F.R. Part 63, Subpart FFFFF (Iron and Steel NESHAP), the NESHAP for Steel Pickling-HCl Process Facilities and Hydrochloric Acid Regeneration Plants (Steel Pickling NESHAP), 40 C.F.R. Part 63, Subpart CCC (Steel Pickling NESHAP), the NESHAP for Lime Manufacturing Plants (Lime Manufacturing Plants NESHAP), 40 C.F.R. Part 63, Subpart AAAAA, and the Indiana State Implementation Plan (SIP).

I. REGULATORY PROVISIONS

The permit and regulatory provisions relevant to this NOV/FOV are as follows:

Title V

a. Title V of the CAA, 42 U.S.C. §§ 7661a-7661f, establishes an operating permit program for certain sources, including "major sources." Pursuant to Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), on July 21, 1992, at 57 Fed. Reg. 32295, the EPA promulgated regulations establishing the minimum elements of a permit program to be administered by any air pollution control agency. These regulations are codified at 40 C.F.R. Part 70 and are known as the Title V permit program.

b. 40 C.F.R. § 70.2 defines "major source," in part, as any stationary source belonging to a single major industrial grouping and that directly emits or has the potential to emit 100 tons per year (tpy) of any air pollutant, as defined under Section 302 of the CAA, 42 U.S.C. § 7602.

c. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), 40 C.F.R. § 70.7(b), state that after the effective date of any permit program approved or promulgated under Title V of the CAA, no source subject to Title V may operate the source except in compliance with its Title V permit.

e. The EPA promulgated final interim approval of the Indiana Title V program on November 14, 1995, 60 Fed. Reg. 57191, and the program became effective on that date. Final full approval of the program was promulgated on December 4, 2001, 66 Fed. Reg. 62969.

f. The regulation at 40 C.F.R. § 70.6(b)(1) specifies that all terms and conditions in a permit issued under a Part 70 program, including any provisions designed to limit a source's potential to emit, are enforceable by the EPA under the CAA.

g. 326 Indiana Administrative Code (IAC) Part 2, Rule 7 sets forth the Indiana Part 70 Permit Program.

h. On December 14, 1995, 60 Fed. Reg. 57188, the EPA approved 326 IAC 2-7-5 as part of the Indiana SIP. 326 IAC 2-7-5 governs Title V permit content.

i. On December 14, 1995, 60 Fed. Reg. 57188, the EPA approved 326 IAC 2-7-6 as part of the Indiana SIP. 326 IAC 2-7-6 governs Title V permit compliance requirements.

j. 326 IAC 2-7-6(1) provides that Title V permits issued under this rule shall contain requirements with respect to compliance certification, testing, monitoring, reporting and record keeping sufficient to assure compliance with the terms and conditions of a Part 70 permit consistent with Section 5(3) of this rule.

k. During the time of investigation in this NOV/FOV, the IHE Facility has operated under Title V Renewal Permit, No. 089-29993-00316 issued by the Indiana Department of Environmental Management (IDEM) on December 10, 2012. In addition, during the duration of time under investigation in this document, the IHE Facility has operated under various Minor Permit Modifications, Administrative Amendments, and Significant and Minor Source Modifications to its Title V Permit. The changes prompting these permits may have affected the numbering of permit conditions. The following requirements are found in the IHE Facility Title V Permit(s):

    i. Condition B.11 of ArcelorMittal's Title V Permit sets forth the emergency provisions that must be followed.

ii. Condition C.1(a) of ArcelorMittal's Title V operating permit provides that, pursuant to 326 IAC 5-1-2, opacity shall not exceed an average of twenty percent (20%) in any one six-minute averaging period as determined in 326 IAC 5-1-14.

iii. Condition C.7(a) of ArcelorMittal's Title V Permit requires that performance test protocols must be submitted to IDEM no later than thirty-five (35) days prior to the intended test date.

iv. Condition C.10 of ArcelorMittal's Title V permit states that ArcelorMittal must submit a Continuous Compliance Plan to IDEM, and must comply with the Plan, among other requirements, pursuant to 326 IAC 6.8-8-1 and 6.8-8-8.

v. Condition D.2.3 of ArcelorMittal's Title V Permit provides that pursuant to 326 IAC 6.8-2-17(b), opacity for the blast furnace casthouse monitor No. 7 shall not exceed fifteen percent (15%) as a 6-minute average.

vi. Condition D.2.6(c)(1) of ArcelorMittal's Title V Permit states that the CO emissions from the No. 7 blast furnace stoves (stack 170) shall not exceed 3,968 pounds per hour (lbs/hr) based on a rolling 30-day average.

vii. Condition D.2.11 of ArcelorMittal's Title V Permit states that ArcelorMittal must not exceed threshold levels of sulfur dioxide (SO_2) emissions from specified emissions units from the No. 7 blast furnace: (b) 0.220 pounds per ton (lbs/ton) and 50.400 lbs/hr from the blast furnace canopy; and (c) 0.220 lbs/ton and 50.400 lbs/hr from the casthouse baghouse.

viii. Condition D.2.14(a) of ArcelorMittal's Title V operating permit requires the No. 7 Blast Furnace stockhouse pellet baghouse to be in operation at all times that the stockhouse pellet process is in operation.

ix. Condition D.2.14(b) of ArcelorMittal's Title V Permit requires the No. 7 Blast Furnace stockhouse coke baghouse to be in operation when dust suppression is required to limit product fugitives unless coke material moisture content is acting as an alternative dust suppression.

x. Condition D.2.14(c) of ArcelorMittal's Title V Permit requires the No. 7 Blast Furnace casthouse west baghouse to be in operation at all times that the blast furnace is casting under normal damper operating configurations.

xi. Condition D.2.14(e) of ArcelorMittal's Title V Permit requires the baghouses for the coke handling equipment to be in operation when dust suppression is required to limit product fugitives unless coke material moisture content is acting as an alternative dust suppression.

xii. Condition D.2.18 of ArcelorMittal's Title V Permit states that ArcelorMittal must maintain a carbon monoxide (CO) continuous emission monitoring system (CEMS), and must comply with a backup operation and maintenance plan any time when the CO system is out of operation, among other requirements.

xiii. Condition D.3.1(b) of ArcelorMittal's Title V Permit provides that, pursuant to 326 IAC 6.8-2-17, total suspended particulate (TSP) emissions from the Sinter Plant discharge end baghouse shall not exceed 0.01 grains per dry standard cubic foot (gr/dscf) and 11.70 lbs/hr.

xiv. Condition D.3.6 of ArcelorMittal's Title V Permit requires that the main discharge and end baghouses shall be in operation at all times when the windbox, crusher, and cooler are in operation.

xv. Condition D.3.7 of ArcelorMittal's Title V Permit requires ArcelorMittal to (a) continuously monitor Sinter Plant volatile organic compound (VOC) emissions and (b) comply with the VOC CEMS maintenance, operating procedures, quality assurance procedures, and performance specifications in 326 IAC 3-5.

xvi. Condition D.4.3(a) of ArcelorMittal's Title V Permit provides that daily visible emission notations shall be conducted at transfer points when the PCI System baghouses are not operating.

xvii. Condition D.5.1(g) of ArcelorMittal's Title V Permit provides that pursuant to 326 IAC 6.8-2-17, total suspended particulate from the No. 2 basic oxygen furnace (BOF) ladle metallurgical station baghouse shall not exceed 0. gr/dscf and 2.00 lbs/hr.

xviii. Condition D.5.2(f) of ArcelorMittal's Title V Permit provides that pursuant to 326 IAC 6.8-2-17 (formerly 326 IAC 6.8-3-2, repealed), opacity for the No. 2 BOF shop roof monitor shall not exceed twenty percent (20%) as a 3-minute average.

xix. Condition D.5.9 of ArcelorMittal's Title V Permit provides that the flare for controlling CO from the No. 10 BOF off-gas scrubber and No. 20 BOF off-gas scrubber system shall be in operation at all times that respective furnaces are in operation.

xx. Condition D.6.2(b) of ArcelorMittal's Title V Permit provides that pursuant to 326 IAC 6.8-2-17 (formerly 326 IAC 6.8-3-2 repealed), opacity for the No. 4 BOF shop roof monitor shall not exceed twenty percent (20%) as a 3-minute average.

xxi. Condition D.6.7(b) of ArcelorMittal's Title V Permit requires that the BOF secondary ventilation baghouse shall be in operation at all times that either the No. 50 or N0. 60 furnaces are operating under normal conditions.

xxii. Condition D.7.1(a) of ArcelorMittal's Title V Permit provides that, pursuant to 326 IAC 6.8-2-17, combined PM10 emissions from the No.1 and No. 2 Kiln baghouses stacks shall not exceed 0.110 lbs/ton and 7.149 lbs/hr.

xxiii. Condition D.8.1(a) of ArcelorMittal's Title V Permit provides that, pursuant to 326 IAC 6.8-2-17, PM10 emissions from the EAF shop ladle metallurgical station baghouse shall not exceed 0.01 gr/dscf and 0.820 lbs/hr.

xxiv. Condition D.8.3(b) of ArcelorMittal's Title V Permit provides that opacity from the EAF shop roof monitor shall not exceed twenty percent (20%), six (6) minute average.

xxv. Condition D.8.3(c) of ArcelorMittal's Title V Permit provides that opacity from the EAF shop ladle metallurgical station baghouse shall not exceed five percent (5%), six (6) minute average.

xxvi. Condition D.8.7(b) of ArcelorMittal's Title V Permit states that, in order to make requirements of 326 IAC 2-2 (PSD) not applicable to the regenerative ladle preheaters, CO emissions shall not exceed 1.15 lbs/hr and 1.31 tpy.

xxvii. Condition D.13.5(e) of ArcelorMittal's Title V Permit states that nitrogen oxides (NOx) emissions from the No. 504 Boiler shall be limited to less than 240.6 tons per 12 consecutive month period.

xxviii. Condition D.14.6 of ArcelorMittal's Title V Permit requires recording of pressure drop across the baghouse used in conjunction with the former mold foundry baghouse stack once per day when the processes are in operation and venting to the atmosphere and monitor calibration at least once per year.

xxix. Condition G.1.1 states that the provisions of 40 C.F.R. 63, Subpart A-General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the affected sources, except when otherwise specified by Table 4 to 40 C.F.R. 63, Subpart FFFFF.

xxx. Condition G.1.2 states that the Permittee shall comply with the applicable provisions in the Iron and Steel NESHAP, 40 C.F.R. Part 63.

xxxi. Condition G.3.2 states that the permittee shall comply with applicable provisions of the Lime Manufacturing NESHAP, 40 C.F.R. Part 63, Subpart AAAAA.

xxxii. Condition G.4.2 states that the permittee shall comply with applicable provisions of the Steel Pickling NESHAP, 40 C.F.R. Part 63, Subpart CCC.

xxxiii. Condition G.7.2 states that the permittee shall comply with applicable provisions of the Boiler NESHAP, 40 C.F.R. Part 63, Subpart DDDDD.

Iron and Steel NESHAP

a. The IHE Facility is subject to the Iron and Steel NESHAP, 40 C.F.R. Part 63, Subpart FFFFF.

b. The following requirements are found in the Iron and Steel NESHAP:

i. 40 C.F.R. § 63.8 - Subject to certain exceptions, you must operate continuous monitoring systems continuously;

ii. 40 C.F.R. § 63.7790(a) - You must meet each emission limit and opacity limit in Table 1 to this subpart that applies to you;

iii. 40 C.F.R. § 63.7800(b) - You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in § 63.7790(b);

iv. 40 C.F.R. § 63.7810(a) - You must be in compliance with the emission limitations and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in § 63.2.

v. 40 C.F.R. § 63.7830(a) - You must install, operate, and maintain a continuous parameter monitoring system for each capture system subject to an operating limit in § 63.7790(b)(1) in accordance with this section;

vi. 40 C.F.R. § 63.7832(a) - You must continuously monitor when an affected source is operating to demonstrate compliance, unless exceptions apply;

vii. 40 C.F.R. § 63.7833(a) - You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in 40 C.F.R. § 63.7790(a) by meeting the requirements in Table 3 to this subpart;

viii. 40 C.F.R. § 63.7833(b) - You must demonstrate continuous compliance for each capture system subject to an operating limit in § 63.7790(b)(1) by (1) Operating the capture system at or above the lowest values or settings

established for the operating limits in your operation and maintenance plan; and (2) Monitoring the capture system according to the requirements in § 63.7830(a) and collect, reduce, and record the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart.

ix. 40 C.F.R. § 63.7834 - You must demonstrate compliance for each capture system and control device with the operation and maintenance requirements by meeting the requirements identified in this section, including the requirement to record all information associated with specified monitoring.

Steel Pickling NESHAP

a. The IHE Facility is subject to the Steel Pickling NESHAP, 40 C.F.R. Part 63, Subpart CCC.

b. The following requirements are found in the Steel Pickling NESHAP:

i. 40 C.F.R. § 63.1157(a) - No owner or operator of an existing affected continuous or batch pickling line at a steel pickling facility shall allow HCl to be discharged at a mass emission rate that corresponds to a collection efficiency of less than 97 percent.

ii. 40 C.F.R. § 63.1162(a) - The owner of a steel pickling facility must monitor flow rate for wet scrubbers and must operate the wet scrubber with water flow rates less than the minimum values established in performance tests.

iii. 40 C.F.R. § 63.1164(a) - As required by § 63.10(d)(2), the owner or operator of an affected source shall report the results of any performance test as part of the notification of compliance status within 60 days following the completion of the performance test.

Lime Manufacturing NESHAP

a. The IHE Facility is subject to the Lime Manufacturing NESHAP, 40 C.F.R. Part 63, Subpart AAAAA.

b. The following requirements are found in the Lime Manufacturing NESHAP:

i. 40 C.F.R. § 63.7090(a) -The affected facility must meet the applicable emission limit and opacity limit in Table 1 of the subpart. Table 1 at Condition 1 states that for each existing lime kiln and their associated lime coolers that did not have a wet scrubber installed and operating prior to January 5, 2004 PM emissions must not exceed 0.12 pounds per ton of stone feed (lb/tsf).

ii. 40 C.F.R. § 63.7100(d)(6) -You must implement a written operation, maintenance, and monitoring (OM&M) plan that includes corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the operating limits specified in Table 2 to this subpart.

iii. 40 C.F.R. § 63.7113(d)(6) - Bag leak detection systems must be installed, operated, adjusted, and maintained according to the manufacturer's written specifications and recommendations.

Boiler NESHAP

a. The IHE Facility is subject to the Boiler NESHAP, 40 C.F.R. Part 63, Subpart DDDDD.

b. The following requirement is found in the Boiler NESHAP:

i. 40 C.F.R. § 63.7540(a) - You must demonstrate continuous compliance with each emission limit in Tables 1 and 2 or 11 through 13 to this subpart, the work practice standards in Table 3 to this subpart, and the operating limits in Table 4 to this subpart that applies to you according to the methods specified in Table 8 to this subpart and paragraphs (a)(1) through (19) of this section.

Indiana SIP

a. The IHE Facility is subject to the Indiana SIP.

b. The following requirements are found in the Indiana SIP:

i. 326 IAC 2-2, governing permit review rules for the Prevention of Significant Deterioration (PSD), became effective June 18, 2007, 72 Fed. Reg. 33395, as part of the Indiana SIP.

ii. 326 IAC 2-2-3 provides that an owner or operator of a major stationary source or major modification must comply with applicable emission limitation and best available control technology standards.

iii. 326 IAC 3-5 requires that specified sources or emissions units must complete continuous monitoring and describes how monitoring is to be accomplished. This regulation was approved as part of the Indiana SIP on December 28, 2009, 74 Fed. Reg. 68541.

iv. 326 IAC 3-6-2 governs source sampling procedures and requires that any person who is to perform an emissions test must complete a test protocol form and submit it to the department no later than thirty-five days before the intended test date. This regulation was approved as part of the Indiana SIP on October 23, 2013, 78 Fed. Reg. 63093.

v. 326 IAC 5-1-2 governs visible emissions and was approved as part of the Indiana SIP on June 16, 1997, 62 Fed. Reg. 18521.

vi. 326 IAC 5-1-2(2)(B) states that visible emissions from a facility located in Lake County shall not exceed an average of twenty percent (20%) opacity in any six-minute averaging period unless otherwise specified in 326 IAC 6.8-2.

vii. 326 IAC 6.8, governs particulate matter and was approved as part of the Indiana SIP on May 22, 2006, 71 Fed. Reg. 14383.

viii. 326 IAC 6.8-2-17(b) provides that the IHE Facility's Number 2 BOF roof monitor shall meet a 20% opacity limit based on a 3-minute average (previously 326 IAC 6.8-3-2, repealed).

ix. 326 IAC 6.8-2-17(b) provides that the IHE Facility's Number 4 BOF roof monitor shall meet a 20% opacity limit based on a 3-minute average (previously 326 IAC 6.8-3-2, repealed).

x. 326 IAC 6.8-2-17(b) provides that the IHE Facility's Number 7 blast furnace casthouse shall meet a 15% opacity limit based on a 6-minute average (previously 326 IAC 6.8-3-2, repealed).

xi. 326 IAC 6.8-2-17(b) provides that the IHE's Facility's electric arc furnace (EAF) shop roof monitor shall meet a 20% opacity limit based on a 6-minute average.

xii. 326 IAC 6.8-2-17(b) provides that the IHE Facility's EAF shop ladle metallurgical station baghouse shall meet a 5% opacity limit based on a 6-minute average.

xiii. 326 IAC 6.8-2-17(a) provides that the IHE Facility's Number 2 BOF ladle metallurgical station baghouse shall meet an emission limit of 0.0052 gr/dscf TSP and 2.00 lbs/hr TSP.

xiv. 326 IAC 6.8-2-17(a) provides that the IHE Facility's sinter plant discharge end baghouse shall meet an emission limit of 0.01 gr/dscf TSP and 17.00 lbs/hr TSP.

xv. 326 IAC 6.8-2-17(a) provides that the IHE Facility's lime plant firing and kiln baghouses shall meet an emission limit of 0.110 lbs/ton and 7.149 lbs/hr.

xvi. 326 IAC 6.8-2-17(a) provides that the IHE Facility's EAF shop ladle metallurgical station baghouse shall meet an emission limit of 0.01 gr/dscf and 0.820 lbs/hr.

xvii. 326 IAC 6.8-8 contains Continuous Compliance Plan requirements applicable to the IHE Facility.

xviii. 326 IAC 7-4.1-11 governs sulfur dioxide (SO_2) emissions and was approved as part of the Indiana SIP on September 26, 2005, 70 Fed. Reg. 56129.

xviii. 326 IAC 7-4.1-11(a)(14) provides that the IHE Facility's number 7 blast furnace canopy must comply with a SO_2 emission limit of 0.220 lbs/ton and 50.400 lbs/hour.

ix. 326 IAC 7-4.1-11(a)(15) provides that the IHE Facility's number 7 blast furnace casthouse baghouse must comply with a SO_2 emission limit of 0.220 lbs/ton and 50.400 lbs/hour.

II. EXPLANATION OF VIOLATIONS

The EPA found the following violations at the IHE Facility:

a. No. 7 Blast Furnace – Flare Stack Opacity

Regulated by: Title V Permit, Section C
Indiana SIP 326 IAC 5-1-2(2)(B)

Sources: Quarterly Deviation and Compliance Monitoring Report: Second Quarter 2014

ArcelorMittal reported an exceedance of the 20%, 6-minute average, source-wide state opacity limit at the No. 7 Blast Furnace Flare Stack on 5/18/2014.

b. Late Intent to Test Notification

Regulated by: Title V Permit, Section C.7(a)
Indiana SIP 326 IAC 3-6-2(a)

Sources: Quarterly Deviation and Compliance Monitoring Reports: Third Quarter 2011; First Quarter 2018

ArcelorMittal reported a test protocol was not submitted 35 days prior to intended test date for one test at the No. 7 Blast Furnace in 2011 and one test at the No. 504 Boiler in 2018.

c. No. 7 Blast Furnace Casthouse Roof Monitor Opacity

Regulated by: Title V Permit, Sections D and G,
Indiana SIP 326 IAC 6.8-2-17(b)

Iron and Steel NESHAP, 40 C.F.R. §§ 63.7790(a), Tables 1 and 3

Sources: Quarterly Deviation and Compliance Monitoring Reports: First-Second Quarters 2011; First, Third, Fourth Quarters 2013; Second-Third Quarters 2014; First Quarter 2015; First-Second, Fourth Quarters 2016; Second Quarter 2017

Semiannual Deviation and Compliance Monitoring Reports: First Half 2011; First-Second Half 2013; First-Second Half 2014; First Half 2015; First-Second Half 2016; First-Second Half 2017

ArcelorMittal reported exceedances of the 20%, 6-minute average federal and 15%, 6-minute average state opacity limits for 2, 6-minute averaging periods in 2011; 11, 6-minute averaging periods in 2013; 4, 6-minute averaging periods in 2014; 1, 6-minute averaging period in 2015; 4, 6-minute averaging periods in 2016; and 2, 6-minute averaging periods in 2017.

d. No. 7 Blast Furnace – Rolling 30-Day Average CO Limit

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 2-2-3

Sources: Quarterly Deviation and Compliance Monitoring Reports: First-Second Quarters 2012

ArcelorMittal reported that the 30-Day average CO emission limit at the No. 7 Blast Furnace was exceeded from March 28, 2012 through April 21, 2012.

e. No. 7 Blast Furnace – Sulfur Dioxide Emission Limits at Blast Furnace Canopy and Casthouse Roof

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 7-4.1-11

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second Quarter 2012–Third Quarter 2018

ArcelorMittal reported non-compliance with the 0.220 lb/ton and 50.400 lb/hr SO_2 emission limits at the No. 7 Blast Furnace Canopy and Casthouse Baghouse.

f. No. 7 Blast Furnace – Failure to Operate Stockhouse Pellet Baghouse While Processing Pellets

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 2-7-6(6)

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second Quarter 2010 and Second Quarter 2012

ArcelorMittal reported a failure to operate the stockhouse pellet baghouse while processing pellets for 8.75 hours on 5/12/10 and for 2.6 hours on 6/14/2012.

g. No. 7 Blast Furnace – Failure to Operate Stockhouse Coke Baghouse While Processing Coke

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 2-7-6(6)

Sources: Quarterly Deviation and Compliance Monitoring Reports: First-Second Quarter 2010 and Second Quarter 2012

ArcelorMittal reported a failure to operate the stockhouse coke baghouse while processing coke when baghouse fans shut down unexpectedly for 3 hours on 3/12/2010 and for 6.8 hours on 5/13/2010.

h. No. 7 Blast Furnace – West Baghouse Fan Failure

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 2-7-6(6)

Sources: Quarterly Deviation and Compliance Monitoring Report: Fourth Quarter 2014; Fourth Quarter 2016

ArcelorMittal reported a power loss which affected the west baghouse fans and the crossover damper for approximately one hour on 11/26/14 and 10/20/16.

i. No. 7 Blast Furnace – Failure to Operate Baghouses for the Coke Handling Equipment

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 2-7-6(6)

Source: Quarterly Deviation and Compliance Monitoring Report: First Quarter 2010

ArcelorMittal reported a failure to operate the Transfer Tower T-4 baghouse when baghouse fans shut down unexpectedly for 2.75 hours on 3/11/2010.

j. No. 7 Blast Furnace – Failure to Conduct CEM Inspections

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 2-7-5(3)(A)(iii)

Source: Quarterly Deviation and Compliance Monitoring Report: First Quarter 2012

ArcelorMittal reported that the daily inspection of the CO CEMS monitor was not performed on 1 day in 2012.

k. No. 7 Blast Furnace – East Baghouse Fan Amp Operating Parameter

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Sources: Semiannual Compliance Monitoring Reports: First-Second Half 2010; First Half 2011

ArcelorMittal reported a failure to meet the east baghouse minimum fan amp operating parameter at the No. 7 Blast Furnace for a total of 5.68 hours in 2010 and 4.55 hours in 2011.

l. No. 7 Blast Furnace – East Baghouse Fan Amp Monitor Downtime

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7830(a)

Sources: Semiannual Deviation and Compliance Monitoring Reports: First Half 2010, First Half 2011

ArcelorMittal reported downtime of the No. 7 Blast Furnace East Baghouse continuous fan amp monitor for a total of 0.9 hours in 2010 and 40.4 hours in 2011.

m. No. 7 Blast Furnace – East Baghouse Fan Amp Monitor Out-Of-Control Period

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7830(d)

Source: Semiannual Deviation and Compliance Monitoring Report: First Half 2010

ArcelorMittal reported that the No. 7 Blast Furnace East Baghouse continuous fan amp monitor experienced an out-of-control period for a total of 14 hours in 2010.

n. No. 7 Blast Furnace – West Baghouse Fan Amp Operating Parameter

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Sources: Semiannual Deviation and Compliance Monitoring Reports: First Half 2010; Second Half 2015; First-Second Half 2016

ArcelorMittal reported a failure to meet the No. 7 Blast Furnace West Baghouse minimum fan amp operating parameter for a total of 44 hours in 2010; 22.7 hours in 2011; 127.6 hours in 2012; 31 hours in 2013; 25.6 hours in 2014; 4 hours in 2015; and 2.17 hours in 2016.

o. No. 7 Blast Furnace – West Baghouse Fan Amp Monitor Downtime

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7830(a)

Sources: Semiannual Deviation and Compliance Monitoring Reports: First Half 2010; Second Half 2011; Second Half 2013; First-Second Half 2014; Second Half 2016

ArcelorMittal reported downtime of the No. 7 Blast Furnace West Baghouse continuous fan amp monitor for a total of 0.9 hours in 2010; 1 hour in 2011; 35.4 hours in 2013; 19.6 hours in 2014; and 5.5 hours in 2016.

p. No. 7 Blast Furnace – East Baghouse O&M

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Sources: Semiannual Deviation and Compliance Monitoring Reports: First-Second Half 2010; First Half 2011; Second Half 2012; First Half 2013; First-Second Half 2015

ArcelorMittal reported O&M deviations at the No. 7 Blast Furnace East Baghouse, including damper faults and failure to timely acknowledge BLD alarms, on a total of 199 days in 2010; 3 days in 2011; 18 days in 2012; 166 days in 2013; 21 days in 2014; and 3 days in 2015.

q. No. 7 Blast Furnace – West Baghouse O&M

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Sources: Semiannual Deviation and Compliance Monitoring Reports: Second Half 2010; First- Half 2011; First-Second Half

2012; First-Second Half 2013; First-Second Half 2014; First-Second Half 2015; First-Second Half 2016

ArcelorMittal reported operation and maintenance deviations at the No. 7 Blast Furnace East Baghouse, including damper faults and failure to timely acknowledge BLD alarms, on a total of 105 days in 2010; 60 days in 2011; 34 days in 2012; 74 days in 2013; 83 days in 2014; 44 days in 2015; and 11 days in 2016.

r. No. 2 BOF Shop Roof Monitor Opacity

Regulated by: Title V Permit, Sections D and G
Indiana SIP 326 IAC 6.8-2-17(b)
Iron and Steel NESHAP, 40 C.F.R. § 63.7790(a), Tables 1 and Table 3

Sources: Semiannual Deviation and Compliance Monitoring Reports: First-Second Half 2010; Second Half 2011; First-Second Half 2012; First-Second Half 2013; Second Half 2014; First-Second Half 2015, First Half 2016

Quarterly Deviation and Compliance Monitoring Report: Third Quarter 2011; First-Third Quarters 2012; First-Third Quarters 2013; Third Quarter 2014; First-Fourth Quarters 2015; Second Quarter 2016

ArcelorMittal reported exceedances of the 20%, 3-minute average, federal and state opacity limits at the No. 2 BOF shop roof monitor for 21, 3-minute average periods in 2010; 3, 3-minute periods in 2011; 15, 3-minute periods in 2012; 14, 3-minute periods in 2013; 7, 3-minute periods in 2014; 13, 3-minute periods in 2015; and 1, 3-minute period in 2016.

s. No. 2 BOF – Ladle Metallurgy Facility PM Emission Limit

Regulated by: Title V Permit, Section D
Indiana SIP, 326 IAC 6.8-2-17(a)

Source: Quarterly Deviation and Compliance Monitoring Report: First Quarter 2011

ArcelorMittal reported TSP mass emissions of 3.09 lb/hr on February 25, 2011.

t. No. 2 BOF – Operating Without Flare

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 2-7-6(6)

Sources: Quarterly Deviation and Compliance Monitoring Reports: First-Second Quarters 2010; Second Quarter 2013; Fourth Quarter 2014; First, Fourth Quarters 2015; First Quarter 2017

ArcelorMittal reported heats were completed without indication of a lit flare on 2 days in 2010; 1 day in 2013; 3 days in 2014; 4 days in 2015; and 1 day in 2017.

u. No. 2 BOF – 10 OG Primary Scrubber Water Flow Operating Parameter

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Source: Semiannual Deviation and Compliance Monitoring Reports: First-Second Half 2010

ArcelorMittal reported deviations from the 10 OG Primary Scrubber water flow operating parameter for 171.5 hours in 2010.

v. No. 2 BOF – 20 OG Primary Scrubber Water Flow Operating Parameter

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Sources: Semiannual Deviation and Compliance Monitoring Report: First Half 2016

ArcelorMittal reported a deviation from the 20 OG Primary Scrubber water flow operating parameter for a total of 9.8 hours in 2016.

w. No. 2 BOF – 10 OG Primary Scrubber Water Flow Monitor Downtime

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7830(a)

Source: Semiannual Deviation and Compliance Monitoring Report: Second Half 2010

ArcelorMittal reported 10 OG Primary Scrubber water flow monitoring downtime for 0.3 hours in 2010.

x. No. 2 BOF – 10 OG Primary Scrubber Differential Pressure Operating Parameter

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Source: Semiannual Deviation and Compliance Monitoring Report: First Half 2013

ArcelorMittal reported deviations from the 10 OG Primary Scrubber differential pressure operating parameter for 52.3 hours in 2013.

y. No. 2 BOF – 20 OG Primary Scrubber Differential Pressure Operating Parameter

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Sources: Semiannual Deviation and Compliance Monitoring Reports: First-Second Half 2010; First Half 2011; First Half 2012; First Half 2014

ArcelorMittal reported deviations from the 20 OG Primary Scrubber differential pressure operating parameter for a total of 288.5 hours in 2010; 52.8 hours in 2011; 36.5 hours in 2012; 5 hours in 2014.

z. No. 2 BOF – 20 OG Primary Scrubber Pressure Differential Monitor Downtime

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7830(a)

Sources: Semiannual Deviation and Compliance Monitoring Reports: Second Half 2010, First Half 2011, First Half 2014

ArcelorMittal reported downtime of the 20 OG Primary Scrubber water flow monitor for 0.3 hours in 2010; 3 hours in 2011; and 0.9 hours in 2014.

aa. No. 2 BOF – Secondary Scrubber Fan Amp Operating Parameter

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Sources: Semiannual Deviation and Compliance Monitoring Reports: First-Second Half 2010; Second Half 2011; First Half 2012; Second Half 2013; First-Second Half 2014

ArcelorMittal reported deviations from the Secondary Scrubber fan amp operating parameter for a total of 18.1 hours in 2010; 31.6 hours in 2011; 1.5 hours in 2012; 8 hours in 2013; and 10.2 hours in 2014.

bb. No. 2 BOF – Secondary Scrubber Fan Amp Monitor Downtime

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7830(a)

Sources: Semiannual Deviation and Compliance Monitoring Reports: First-Second Half 2010; Second Half 2011; Second Half 2012; Second Half 2013; First-Second Half 2014

ArcelorMittal reported downtime of the Secondary Scrubber fan amp monitor for a total of 2.3 hours in 2010; 92.9 hours in 2012; 5.7 hours in 2013; and 37.8 hours in 2014.

cc. No. 2 BOF – Secondary Scrubber O&M

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. §§ 7800(b), 63.7834

Sources: Semiannual Deviation and Compliance Monitoring Reports: First Half 2012; First Half 2014; First Half 2016

ArcelorMittal reported operation and maintenance plan deviations at the Secondary Scrubber, including damper faults, on 1 day in 2012, 3 days in 2014, and 3 days in 2016.

dd. No. 2 BOF – LMF Baghouse O&M

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. §§ 63.7800(b), 63.7834

Source: Semiannual Deviation and Compliance Monitoring Report: First Half 2011

ArcelorMittal reported failure to timely respond to BLD alarms at the LMF Baghouse on 18 days in 2011.

ee. No. 4 BOF Shop Roof Monitor and Teeming Isle Roof Monitor Opacity

Regulated by: Title V Permit, Sections C, D and G
Indiana SIP 326 IAC 6.8-2-17(b)
Iron and Steel NESHAP, 40 C.F.R. § 63.7790(a), Tables 1 and 3

Sources: Semiannual Deviation and Compliance Monitoring Reports: First-Second Half 2011; First Half 2012; Second Half 2014; First Half 2016; First Half 2018

Quarterly Deviation and Compliance Monitoring Reports: First-Third Quarters 2011; First Quarter 2012; Second-Third Quarters 2014; First Quarter 2016; Second Quarter 2018

ArcelorMittal reported exceedances of the 20%, 3-minute average, federal and state opacity standards at the No. 4 BOF shop roof monitor for 5, 3-minute

averaging periods in 2011; 3, 3-minute averaging periods in 2012; 8, 3-minute averaging periods in 2014; and 1, 3-min averaging period in 2018.

ArcelorMittal reported exceedances of the 20%, 6-minute average state opacity standard at the No. 4 BOF Teeming Aisle roof monitor for 2, 6-minute averaging periods in 2016.

ff. No. 4 BOF Shop PM – Operating without the Mold Fume Exhaust Baghouse

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 2-2; 326 IAC 2-1.1-5

Source: Quarterly Deviation and Compliance Monitoring Report: Second Quarter 2017

ArcelorMittal reported that the continuous caster was operated without the Mold Fume Exhaust Baghouse for approximately twenty hours between May 5 and 6, 2017.

gg. No. 4 BOF – Failure to Operate Secondary Vent Baghouse

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 2-7-6(6)

Sources: Quarterly Deviation and Compliance Monitoring Reports: Fourth Quarter 2010, Third Quarter 2013, and Second Quarter 2018

ArcelorMittal reported that the Secondary Vent Baghouse fans unexpectedly tripped due to fan motor issues for 15 minutes on 10/28/2010; 46 minutes on 11/3/2010; and 26 minutes on 8/14/2013.

ArcelorMittal reported that the Secondary Vent Baghouse fans were off for test purposes during a Method 9 visible emission compliance test performed in April 2018.

hh. No. 4 BOF– Secondary Baghouse Fan Amp Operating Parameter

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Sources: Semiannual Deviation and Compliance Monitoring Reports: First Half 2010; First-Second Half 2011; Second Half 2012; Second Half 2013; First-Second Half 2014; First Half 2015; First-Second Half 2016; First Half 2018

ArcelorMittal reported deviations from the No. 4 BOF Secondary Baghouse fan amp operating parameter for a total of 74.6 hours in 2010; 27.3 hours in 2011; 0.3

hours in 2012; 0.4 hours in 2013; 73.2 hours in 2014; 6.8 hours in 2015; 12.4 hours in 2016; and 0.77 hours in 2018.

ii. No. 4 BOF– Secondary Baghouse Fan Amp Monitor Downtime

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7830(a)

Sources: Semiannual Deviation and Compliance Monitoring Reports: First Half 2010; First Half 2011; Second Half 2014; First Half 2016

ArcelorMittal reported downtime of the No. 4 BOF Secondary Baghouse fan amp monitor for a total of 71.6 hours in 2010, 1 hour in 2011, 7 hours in 2014, and 20.2 hours in 2016.

jj. No. 4 BOF and Sinter Plant– Secondary Baghouse O&M

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. §§ 63.7800(b), 63.7834

Sources: Semiannual Deviation and Compliance Monitoring Reports: First Half 2010; First Half 2011; Second Half 2012; First-Second Half 2013; Second Half 2015; First-Second Half 2016; First Half 2017

ArcelorMittal reported damper incidents, including damper or leak detector faults and failed actuators, on two days in 2010; on two days in 2011; on four days in 2012; on four days in 2013; on one day in 2015; 46 days in 2016; and 2 days in 2017.

ArcelorMittal reported that monthly ductwork inspections at the BOF and Sinter Plant were not fully completed per the O&M Plan for four months in 2017.

kk. Pugh Ladle Repair Shop – Iron Beaching Opacity

Regulated by: Title V Permit, Section C
Indiana SIP 326 IAC 5-1-2(2)(B)

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second Quarter 2010; First, Third-Fourth Quarters 2011; First, Third Quarters 2012; Second Quarter 2014; Fourth Quarter 2017

ArcelorMittal reported exceedances of the 20%, 6-minute average, source-wide state opacity limit from iron beaching activities at the Pugh Ladle Repair Shop for 6, 6-minute averaging periods in 2010; at least 12, 6-minute averaging periods in

2011; 6, 6-minute averaging periods in 2012; 3, 6-minute averaging periods in 2014; and 4, 6-minute averaging periods in 2017.

ll. Pugh Ladle Repair Shop – Failure to Conduct Continuous Compliance Plan Inspections and Calibrations.

Regulated by: Title V Permit, Sections C and D
Indiana SIP 326 IAC 2-7-5(1), 326 IAC 2-7-6

Sources: Quarterly Deviation and Compliance Monitoring Reports: First Quarter 2011; Fourth Quarter 2012

ArcelorMittal reported a failure to complete baghouse parameter checks on 9 days in 2011, and a failure to timely complete the annual calibration in 2012.

mm. Sinter Plant - Failure to Conduct Quality Assurance Procedures for VOC CEMS

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 3-5

Sources: Quarterly Deviation and Compliance Monitoring Reports: Fourth Quarter 2010; First-Second Quarter 2011; First-Second Quarter 2012; Third-Fourth Quarter 2016

ArcelorMittal reported it failed to complete daily quality assurance inspections of the Sinter Plant VOC CEM during the fourth quarter 2010 (unspecified duration); 8 days in 2011; and 10 days in 2012.

ArcelorMittal reported it failed to complete weekly and monthly preventive maintenance for the CEM in the second half of 2016.

nn. Sinter Plant – PM Limit

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 6.8-2-17

Source: Quarterly Deviation and Compliance Monitoring Report: First Quarter 2011

ArcelorMittal reported a deviation from the SIP TSP limits at the No. 3 Sinter Plant discharge end baghouse during diagnostic testing on March 8, 2011. Testing indicated TSP at 0.015 gr/dscf versus the 0.01 gr/dscf limit.

oo. Sinter Plant – Discharge End Baghouse PM Control Operations

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 2-7-6(6)

Source: Quarterly Deviation and Compliance Monitoring Reports: Third Quarter 2016, Second Quarter 2018

Semiannual Deviation and Compliance Monitoring Reports: First Half 2017, First Half 2018

ArcelorMittal reported that the sinter plant started prior to verifying that the discharge end baghouse was in operation on August 24, 2016.

ArcelorMittal reported that it failed to implement O&M repairs to cladding on Cooler Hood within 30 days of the January 2018 inspection and that monthly ductwork inspections for the No. 3 Sinter Plant Discharge End Ductwork were not fully completed for four months in 2017 and were completed late for two months in 2018.

pp. Sinter Plant– Discharge End Baghouse Fan Amp Operating Parameter

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. §§63.7800(b), 63.7833(b)

Sources: Semiannual Deviation and Compliance Monitoring Reports: Second Half 2010; First-Second Half 2011; Second Half 2014; Second Half 2016

ArcelorMittal reported deviations from the discharge end baghouse fan amp operating parameter for 1 hour in 2010; 5 hours in 2011; 1 hour in 2014; and 2 hours in 2016.

qq. Sinter Plant– VOC CEMS O&M

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. §§ 63.7800(b), 63.7834

Sources: Semiannual Deviation and Compliance Monitoring Reports: Second Half 2010; First Half 2011; First Half 2012

ArcelorMittal reported deviations from the operation and maintenance requirements for the Sinter Plant VOC CEMS by failing to complete daily quality assurance inspections during the second half of 2010; on 8 days in 2011; and on 3 days in 2012.

rr. Sinter Plant - VOC CEMS Monitor Downtime

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 8-13-8
Iron and Steel NESHAP, 40 C.F.R. § 63.7830(a)

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second, Fourth Quarters 2010; First-Fourth Quarters 2011; First-Fourth Quarters 2012; First, Third-Fourth Quarters 2013; First-Fourth Quarters 2014; First-Fourth Quarters 2015; First-Fourth Quarters 2016; First-Fourth Quarters 2017; First-Second Quarters 2018

ArcelorMittal reported periods of Sinter Plant VOC CEMS downtime on a total of 11 days in 2010; 66 days in 2011; 43 days in 2012; 23 days in 2013; 20 days in 2014; 52 days in 2015; 46 days in 2016; 57 days in 2017; and 35 days in 2018.

ss. Sinter Plant – Failure to Timely Submit Intent to Test Protocol

Regulated by: Title V Permit, Section C
Indiana SIP 326 IAC 3-6-2

Sources: Quarterly Deviation and Compliance Monitoring Reports: Third Quarter 2011

ArcelorMittal reported it failed to submit a test protocol 35 day prior to the intended test date in 2011.

tt. Sinter Plant – Main Baghouse Stack Opacity

Regulated by: Title V Permit, Section
Indiana SIP 326 IAC 5-1-2(2)(B)

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second Quarter 2015

ArcelorMittal reported an exceedance of the 20%, 6-minute average, source-wide state opacity limit at the Sinter Plant Main Baghouse Stack on May 18, 2015.

uu. Sinter Plant– Discharge End Baghouse Fan Amp Monitor Downtime

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. § 63.7830(a)

Sources: Semiannual Deviation and Compliance Monitoring Reports: Second Half 2014

ArcelorMittal reported downtime of the Sinter Plant Discharge End Baghouse continuous fan amp monitor for 1 hour in 2014.

vv. Lime Plant – PM Emission Limit

Regulated by: Title V Permit, Sections D and G
Indiana SIP 326 IAC 6.8-2-17(a)
Lime Manufacturing NESHAP, 40 C.F.R. § 63.7090(a), Table 1

Sources: Quarterly Deviation and Compliance Monitoring Reports: Fourth Quarter 2011; Fourth Quarter 2016

Semiannual Deviation and Compliance Monitoring Reports: Second Half 2011; Second Half 2016

ArcelorMittal reported that results from diagnostic stack testing on November 30, 2011 indicated filterable particulate emissions in excess of the SIP limit of 0.110 lbs/ton and 7.149 lbs/hr and NESHAP limit of 0.12 lb/tsf.

ArcelorMittal reported that Lime Plant Kiln 2 baghouse compliance stack testing on December 7–8, 2016 indicated an exceedance of the SIP limit of 0.110 lbs/ton and 7.149 lbs/hr and NESHAP limit of 0.12 lb/tsf.

ww. Lime Plant – Lime Plant Baghouse O&M

Regulated by: Title V Permit, Section G
Iron and Steel NESHAP, 40 C.F.R. §§ 63.7800(b), 63.7834
Lime Manufacturing NESHAP, 40 C.F.R. §§ 63.7090(b)(1), 63.7100(d), 63.7113(d)

Sources: Semiannual Deviation and Compliance Monitoring Reports: First Half 2010; Second Half 2016

ArcelorMittal reported that it failed to respond to BLD alarms at the Lime Plant Baghouse on 5 days in 2010 and during the second half of 2016.

xx. No. 5 Pickle Line – Scrubber Flow Monitor Downtime

Regulated by: Title V Permit, Section G
Steel Pickling NESHAP, 40 C.F.R. § 63.1162(a)

Sources: Semiannual Deviation and Compliance Monitoring Reports: First Half 2010; Second Half 2012; Second Half 2013; First Half 2014

ArcelorMittal reported downtime of the scrubber flow monitor for 4 hours in 2010; 57.2 hours in 2012; 4 hours in 2013; and 24 hours in 2014.

yy. No. 5 Pickle Line – HCl Collection Efficiency

Regulated by: Title V Permit, Section G
Steel Pickling NESHAP, 40 § C.F.R. 63.1157(a)

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second Quarter 2012

Semiannual Deviation and Compliance Monitoring Reports: First Half 2012

ArcelorMittal reported that preliminary test results indicated an average HCl collection efficiency of 96.38% on May 30, 2012, from 10:55 am until 2:47 pm, versus the minimum 97% efficiency limit.

zz. No. 5 Pickle Line – Failure to Submit Performance Test Results Within 60 Days

Regulated by: Title V Permit, Section G
Steel Pickling NESHAP, 40 C.F.R. § 63.1164(a)

Source: Quarterly Deviation and Compliance Monitoring Report: First Quarter 2015

Performance results for No. 5 Pickle Line were not submitted within 60 days of EPA's WebFIRE database through use of EPA's Electronic Reporting Tool (ERT) on 2/11/2015.

Aaa. No. 5 Pickle Line – Scrubber Water Flow Operating Parameters

Regulated by: Title V Permit, Section G
Steel Pickling NESHAP, 40 C.F.R. § 63.1162(a)(2)

Sources: Semiannual Deviation and Compliance Monitoring Report: Second Half 2014

ArcelorMittal reported deviations from the minimum scrubber water flow operating parameter for a total of 37 days in 2014.

Bbb. PCI Raw Coal Baghouse Particulate Control

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 2-7-6(6)

Source: Quarterly Deviation and Compliance Monitoring Report: Fourth Quarter 2015, First Quarter 2016

ArcelorMittal reported that visible emissions notations of transfer points were not documented when the raw coal baghouses were not in operation because coal material moisture content was acting as an alternate dust suppression from 10/1/2015 through 1/21/2016.

Ccc. Failure to Complete Continuous Compliance Plan Requirements

Regulated by: Title V Permit, Section C
Indiana SIP 326 IAC 6.8-8

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second Quarter 2010, Third-Fourth Quarters 2011, First Quarter 2012, First-Fourth Quarters 2014, Third Quarter 2015, First–Third

Quarters 2016; Third-Fourth Quarters 2017; First-Second Quarters 2018

Semiannual Deviation and Compliance Monitoring Reports: First Half 2017; First Half 2018

ArcelorMittal reported that:

i. No. 7 Blast Furnace daily checklists were not completed on 3 days in 2010, 1 day in 2012, and 1 day in 2015;

ii. it failed to record corrective actions taken for periods of out of range pressure differential at the No. 7 Blast Furnace West Casthouse Baghouse on 21 days in 2014 and 2 days in 2017;

iii. corrective actions were not recorded or were insufficiently recorded in response to out-of-range differential pressure readings and fan amperage at the No. 7 Blast Furnace Stock House Baghouse during the third quarter and for 29 days of the fourth quarter in 2014;

iv. it performed the quarterly preventative maintenance 15 days late at the Coke Transfer Tower Baghouse on October 16, 2015;

v. it failed to complete continuous compliance plan inspections at the No. 2 BOF 1 day in 2011, and 5 days in 2014;

vi. it failed to record fan amps at the No. 2 BOF truck hopper baghouse on 59 days in 2014;

vii. it failed to complete continuous compliance plan preventative maintenance inspections at the No. 4 BOF during the second quarter of 2014;

viii. corrective actions were not recorded or were insufficiently recorded in response to out-of-range differential pressure readings at the No. 4 BOF baghouse during the first, second, and third quarters and 36 days of the fourth quarter in 2014 and the third quarter in 2015;

ix. it failed to conduct weekly inspections of the Windbox and discharge end baghouses for 4 weeks in 2011.

x. No. 7 Blast Furnace internal visual bag leak inspections were conducted quarterly instead of monthly during the second quarter of 2016;

xi. quarterly baghouse inspections of ductwork for No. 7 Blast Furnace were not completed in the second quarter of 2016;

xii. that some monthly and quarterly inspections were not completed for No. 4 BOF in the second and third quarters of 2016;

xiii. one weekly baghouse inspection for No. 4 BOF was missed and no paper records for the other weekly baghouse inspections for No. 4 BOF were maintained for the third quarter 2017 inspections;

xiv. for five days in 2017, daily inspections of the North Hot Metal Baghouse at No. 4 BOF were not completed and that for two days in 2017 operators failed follow the O&M Plan when fans tripped at the South Hot Metal Baghouse at No. 4 Steel Producing;

xv. one daily inspection of the Caster Mold Fume Baghouse was not performed in 2017; and daily inspections of the RHOB Baghouse on 2 days in 2017 and 1 day in the first quarter 2018; and

xvi. monthly ductwork inspections for the No. 3 Sinter Plant Discharge End Ductwork were not adequately completed for four months in 2017 and were completed late for two months in 2018.

Ddd. Long Carbon – EAF Roof Monitor Opacity

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 6.8-2-17

Sources: Quarterly Deviation and Compliance Monitoring Reports: Third Quarter 2011; First Quarter-Second Quarters 2013

ArcelorMittal reported potential exceedances of the twenty percent (20%), 6-minute average, state opacity limit at the EAF roof monitor for 3, 6-minute averaging periods in 2011; and 5, 6-minute averaging periods in 2013.

Eee. Long Carbon – EAF – Failure to Complete Continuous Compliance Plan Inspections

Regulated by: Title V Permit, Section C
Indiana SIP 326 IAC 6.8-8

Sources: Quarterly Deviation and Compliance Monitoring Reports: Third Quarter 2012; First Quarter 2013; First Quarter 2015

ArcelorMittal reported that:

i. it failed to conduct monthly inspections of the Main and LMF Baghouses, Ladle Dump, Mold & Tundish Baghouses, LMF Scrubber, and capture

systems for months and for one quarterly inspection of the ladle dryer in 2012;

ii. it failed to do CCP maintenance inspections for the EAF Main baghouse, LMF Baghouse, Pb Steel Baghouse, Ladle Dump, Mold & Tundish Baghouses, LMF Scrubber, and capture systems for two months in 2013;

iii. the Continuous Compliance maintenance records could not be found for the EAF Shop and Ladle Dump and Repair, Shop Caster Tundish and Mold Baghouse, EAF Shop Torch Cutoff baghouse, EAF baghouse, and the Wet Gas Scrubber Parametric LMF Station for the month of February 2015;

iv. daily CCP checklists were not completed for the EAF Baghouse and LMF Station on five days due to personnel availability issues in the first quarter of 2015;

v. daily CCP checklists were not completed for the No. 1 EAF Shop Ladle Dump and Repair, the EAF Shop Caster Tundish and Mold Baghouse and the No. 1 EAF Shop Caster Torch Cutoff on 15 days in the first quarter of 2015; and

vi. daily CCP checklists for the EAF baghouse and for the LMF Station with reported baghouse pressure drop, scrubber flow rate, and scrubbing liquid pH were missing for 27 days in the first quarter of 2015.

Fff. Long Carbon – EAF – LMF Baghouse PM_{10} Emission Limit

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 6.8-2-17(a)

Sources: Quarterly Deviation and Compliance Monitoring Report: Second Quarter 2012

ArcelorMittal reported that stack tests at the EAF shop ladle metallurgy station baghouse on April 24 through 26, 2012 indicated particulate emissions above the limit of 0.01 gr/dscf or 0.820 lbs/hr due to unrecognized bag failure (level unspecified).

Ggg. Long Carbon – EAF – LMF Baghouse Stack Opacity

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 6.8-2-17

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second Quarter 2012

ArcelorMittal reported exceedances of the five percent (5%), 6-minute average opacity limit at the LMF baghouse stack intermittently between approximately 10:00-11:00 am on 5/14/2012.

Hhh. Long Carbon – EAF – CO Limit

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 2-2

Sources: 2011 Annual Compliance Certification

ArcelorMittal reported that, in December 2011, the facility exceeded the CO mass limit of 1.31 tpy (at 1.5 tons) while remaining in compliance with the CO lb/hr limitation and the fuel restriction.

Iii. No. 504 Boiler NO_X Emission Limit

Regulated by: Title V Permit, Section D
326 IAC 2-2; 326 IAC 2-3

Sources: Quarterly Deviation and Compliance Monitoring Reports: First Quarter 2013-Second Quarters 2017

ArcelorMittal reported NO_X emission rate intermittently exceeded the emission limit of a permit condition under active appeal during the first quarter 2016 through the second quarter of 2017.

Jjj. Failure to Timely Notify IDEM of an Emergency Event

Regulated by: Title V Permit, Section B
Indiana SIP 326 IAC 2-7

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second Quarter 2017

ArcelorMittal reported a late report to IDEM regarding an emergency event at Blast Furnace No. 7 Relief Bleeder No. 4.

Kkk. Process Heater Deviations

Regulated by: Title V Permit, Section G
Boiler NESHAP, 40 C.F.R. § 63.7540(a)(13)

Sources: Annual Deviation and Compliance Monitoring Report: 2016

ArcelorMittal reported a deviation from 4/17/16 to 8/5/16 when a tune-up of the process heater was not completed within 30 calendar days of restart.

III. ENVIRONMENTAL IMPACT OF THE VIOLATIONS

Violations of the particulate matter and opacity standards increase public exposure to unhealthy particulate matter. Particulate matter, especially fine particulate, contributes to respiratory problems, lung damage and premature deaths.

3/21/19
Date

Edward Nam
Director
Air and Radiation Division

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAR 2 1 2019

REPLY TO THE ATTENTION OF

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Wendell Carter
Vice President
ArcelorMittal USA LLC
3001 Dickey Road
East Chicago, Indiana 46312

Re: ArcelorMittal USA LLC Notice of Violation and Finding of Violation

Dear Mr. Carter:

This is to advise you that the U.S. Environmental Protection Agency (EPA) has determined that the ArcelorMittal USA LLC (ArcelorMittal) Indiana Harbor West facility (IHW Facility) located at 3001 Dickey Road in East Chicago, Indiana is in violation of the Clean Air Act (the CAA) and associated state pollution control requirements.

The EPA is sending this Notice of Violation and Finding of Violation (NOV/FOV) to notify you that at the IHW Facility we have identified violations of the facility's Title V Permit, the National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities at 40 C.F.R. Part 63, Subpart FFFFF, the NESHAP for Steel Pickling - HCL Processing Facilities and Hydrochloric Acid Regeneration Plants at 40 C.F.R. Part 63, Subpart CCC, and the Indiana State Implementation Plan.

Section 113 of the CAA gives us several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action and bringing a judicial criminal action. The option we select, in part, depends on the efforts taken by ArcelorMittal to correct the alleged violations and the timeframe in which you can demonstrate and maintain continuous compliance with the requirements cited in the NOV/FOV.

Before we determine which enforcement option is appropriate, we are offering you the opportunity to request a conference with us about the violations alleged in the NOV/FOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

The EPA contact in this matter is Patrick Miller. You may call him at 312-886-4044 if you wish to request a conference. Legal questions should be directed to Cynthia A. King, Associate Regional Counsel, at 312-886-6831. The EPA hopes that this NOV/FOV will encourage ArcelorMittal's compliance with the requirements of the CAA.

Sincerely,

Edward Nam
Director
Air and Radiation Division

Enclosure

cc: Phil Perry, Chief
Compliance and Enforcement Branch
Office of Air Quality
Indiana Department of Environmental Management

United States Environmental Protection Agency
Region 5

IN THE MATTER OF:	)	
	)	
ArcelorMittal USA LLC	)	**NOTICE OF VIOLATION AND**
East Chicago, Indiana	)	**FINDING OF VIOLATION**
	)	
	)	**EPA-5-19-IN-05**
Proceedings Pursuant to	)	
the Clean Air Act,	)	
42 U.S.C. §§ 7401 et seq.	)	

NOTICE AND FINDING OF VIOLATION

ArcelorMittal USA LLC (ArcelorMittal) owns and operates an iron and steel manufacturing facility located at 3001 Dickey Road in East Chicago, Indiana (IHW Facility).

The United States Environmental Protection Agency (EPA) is sending this Notice of Violation and Finding of Violation (NOV/FOV) pursuant to Sections 113(a)(1) and (3) of the Clean Air Act (the CAA), 42 U.S.C. § 7413(a)(1) and (3), to notify ArcelorMittal that at the IHW Facility we have identified violations of the facility's Title V Permit, the National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities at 40 C.F.R. Part 63, Subpart FFFFF, the National Emission Standards for Hazardous Air Pollutants for Steel Pickling - HCL Processing Facilities and Hydrochloric Acid Regeneration Plants at 40 C.F.R. Part 63, and the Indiana State Implementation Plan (SIP).

I. REGULATORY PROVISIONS

The permits and regulatory provisions relevant to this NOV/FOV are as follows:

Title V

a. Title V of the CAA, 42 U.S.C. §§ 7661a-7661f, establishes an operating permit program for certain sources, including "major sources." Pursuant to Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), on July 21, 1992, 57 Fed. Reg. 32295, the EPA promulgated regulations establishing the minimum elements of a permit program to be administered by any air pollution control agency. These regulations are codified at 40 C.F.R. Part 70 and are known as the Title V permit program.

b. 40 C.F.R. § 70.2 defines "major source," in part, as any stationary source belonging to a single major industrial grouping and that directly emits or has the potential to emit 100 tons per year (tpy) of any air pollutant, as defined under Section 302 of the CAA, 42 U.S.C. § 7602.

c. 40 C.F.R. § 70.7(b) states that no source subject to Title V may operate the source except in compliance with a Title V permit.

d. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), states that after the effective date of any permit program approved or promulgated under Title V of the CAA, no source subject to Title V may operate the source except in compliance with its Title V permit.

e. The EPA promulgated final interim approval of the Indiana Title V program on November 14, 1995, 60 Fed. Reg. 57191, and the program became effective on that date. Final full approval of the program was promulgated on December 4, 2001, 66 Fed. Reg. 62969.

f. 326 Indiana Administrative Code (IAC) Part 2, Rule 7 sets forth the Indiana Title V Permit Program.

g. On December 14, 1995, 60 Fed. Reg. 57188, EPA approved 326 IAC 2-7-5 as part of the Indiana SIP. 326 IAC 2-7-5 governs Title V permit content.

h. 326 IAC 2-7-5(1) provides that Title V permits shall incorporate emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of a Part 70 permit issuance.

i. On December 14, 1995, 60 Fed. Reg. 57188, EPA approved 326 IAC 2-7-6 as part of the Indiana SIP. 326 IAC 2-7-6, governs Title V compliance requirements.

k. 326 IAC 2-7-6(1) provides that Title V permits issued under this rule shall contain requirements with respect to compliance certification, testing, monitoring, reporting and record keeping sufficient to assure compliance with the terms and conditions of a Part 70 permit consistent with Section 5(3) of this rule.

k. 326 IAC 2-7-6(6) provides that Title V permits issued under this rule shall be subject to provisions as may be required by the commissioner.

l. The IHW Facility is subject to Title V Permit, No. 089-27587-00318 was issued by the Indiana Department of Environmental Management (IDEM) on October 18, 2017. In addition, during the duration of time under investigation in this document, the IHW Facility has operated under Title V Renewal Permit 089-40270-00318, issued on December 10, 2012. Additionally, during the duration of time under investigation in this document, the IHW Facility has operated under various Minor Permit Modifications, Administrative Amendments, and Significant and Minor Source Modifications to its Title V Permit. The changes prompting these permits may have affected the numbering of permit conditions. The following requirements are found in the IHE Facility Title V Permit(s):

i. Condition C.1(a) of ArcelorMittal's Title V permit states that pursuant to 326 IAC 5-1-2, opacity shall not exceed an average of twenty percent (20%) in any one six-minute averaging period as determined in 326 IAC 5-1-14.

ii. Condition C.10(a) of ArcelorMittal's Title V permit states that, pursuant to 326 IAC 6.8-8-1, the Permittee shall perform the inspections, monitoring, and recordkeeping in accordance with the information in 326 IAC 6.8-8 and the facility's Continuous Compliance Plan.

iii. Condition D.1.6(a) of ArcelorMittal's Title V permit states that the No. 3 and No. 4 Blast Furnaces shall be equipped with gas bleeder flares and the pilot flame for the flares shall be present when the blast furnace(s) are in operation.

iv. Condition D.1.6(b) of ArcelorMittal's Title V permit states that No. 4 Blast Furnace Casthouse Baghouse shall be in operation at all times when the No. 4 Blast Furnace is casting.

v. Condition D.1.11(a) (no longer effective as of December 10, 2012) of ArcelorMittal's Title V permit states that visible emission notations of the No. 4 Blast Furnace Casthouse Baghouse shall be performed once per day during normal daylight operations when exhausting to the atmosphere.

vi. Condition D.3.4(b) of ArcelorMittal's Title V permit states that the opacity limits for basic oxygen furnace operations found in this section shall be complied with and shall take precedence over those in 326 IAC 5-1-2 with which they conflict. The Permittee shall comply with an opacity limit at the electrostatic precipitator stack of not more than 20% for a six-minute average.

vii. Condition D.3.4(c) of ArcelorMittal's Title V permit states that the opacity limits for basic oxygen furnace operations found in this section shall be complied with and shall take precedence over those in 326 IAC 5-1-2 with which they conflict. The Permittee shall comply with an opacity limit at the Basic Oxygen Furnace at the roof monitor of no more than 20% for a three-minute average.

viii. Condition D.3.4(d) of ArcelorMittal's Title V permit states that the opacity limits for basic oxygen furnace operations found in this section shall be complied with and shall take precedence over those in 326 IAC 5-1-2 with which they conflict. The Permittee shall comply with an opacity limit at the ladle metallurgical facility baghouse stack of no more than 5% opacity for a three-minute average.

ix. Condition D.3.8(a) of ArcelorMittal's Title V permit states that the ladle metallurgical facility (LMF) baghouse, designated as Baghouse No. 5, shall be in operation at all times when associated process is in operation.

x. Condition D.3.9 of ArcelorMittal's Title V permit states that the main basic oxygen furnace electrostatic precipitator stack shall be equipped with a Continuous Emission Monitor for opacity that complies with the maintenance, operating procedures, quality assurance procedures, and performance specifications in 326 IAC 3-5.

xi. Condition D.8.4(b) of ArcelorMittal's Title V permit states that all vapor collection and control systems shall pass a test for vapor leakage and blockage at least every five years.

xii. Condition E.1.2 of ArcelorMittal's Title V permit states that the Permittee shall comply with the applicable provisions in 40 C.F.R. Part 63, Subpart FFFFF, the National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing (Iron and Steel NESHAP).

xiii. Condition E.2.2 of ArcelorMittal's Title V permit states that the permittee shall comply with applicable provisions of 40 C.F.R. Part 63, Subpart CCC, the National Emission Standards for Hazardous Air Pollutants for Steel Pickling/HCl Process Facilities (Steel Pickling NESHAP).

Iron and Steel NESHAP

a. The IHW Facility is subject to the Iron and Steel NESHAP, 40 C.F.R. Part Subpart FFFFF.

b. The following requirements are found in the Iron and Steel NESHAP:

i. 40 C.F.R. § 63.8 - Subject to certain exceptions, you must operate continuous monitoring systems continuously;

ii. 40 C.F.R. § 63.7790(a) - You must meet each emission limit and opacity limit in Table 1 to this subpart that applies to you;

iii. 40 C.F.R. § 63.7800(b) - You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in § 63.7790(b);

iv. 40 C.F.R. § 63.7810(a) - You must be in compliance with the emission limitations and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in § 63.2.

v. 40 C.F.R. § 63.7830(a) - You must install, operate, and maintain a continuous parameter monitoring system for each capture system subject to an operating limit in § 63.7790(b)(1) in accordance with this section;

vi. 40 C.F.R. § 63.7832(a) - You must continuously monitor when an affected source is operating to demonstrate compliance, unless exceptions apply;

vii. 40 C.F.R. § 63.7833(a) - You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in 40 C.F.R. § 63.7790(a) by meeting the requirements in Table 3 to this subpart;

viii. 40 C.F.R. § 63.7833(b) - You must demonstrate continuous compliance for each capture system subject to an operating limit in § 63.7790(b)(1) by (1) Operating the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan; and (2) Monitoring the capture system according to the requirements in § 63.7830(a) and collect, reduce, and record the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart.

ix. 40 C.F.R. § 63.7834 - You must demonstrate compliance for each capture system and control device with the operation and maintenance requirements by meeting the requirements identified in this section, including the requirement to record all information associated with specified monitoring.

Steel Pickling NESHAP

a. The IHW Facility is subject to the Steel Pickling NESHAP, 40 C.F.R. Part 63, Subpart CCC.

b. The following requirements are found in the Steel Pickling NESHAP:

i. 40 C.F.R. § 63.1157(a)(1) - No owner or operator of an existing affected continuous or batch pickling line at a steel pickling facility shall emit any gases containing HCl of more than 18 parts per million by volume.

ii. 40 C.F.R. § 63.1162(a) - The owner of a steel pickling facility must monitor flow rate for wet scrubbers and must operate the wet scrubber with water flow rates less than the minimum values established in performance tests.

iii. 40 C.F.R. § 63.1165 - The owner of a steel pickling facility must maintain specified records.

Indiana SIP

a. The IHW Facility is subject to the Indiana SIP. The following requirements are found in the Indiana SIP:

i. The EPA approved 326 IAC 5-1-2, governing visible emissions, effective June 16, 1997, 62 Fed. Reg. 18521, as part of the Indiana SIP.

ii. 326 IAC 5-1-2(2)(B) provides that visible emissions from a facility located in Lake County shall not exceed an average of 20% opacity in twenty-four consecutive readings unless otherwise specified in 326 IAC 6.8-2.

iii. EPA approved 326 IAC 6.8, governing particulate matter, effective May 22, 2006, 71 Fed. Reg. 14383, as part of the Indiana SIP.

iv. 326 IAC 6.8-2-21 sets forth the emission limits for the IHW Facility.

v. The EPA approved 326 IAC 8-4-6, governing gasoline dispensing facilities, effective January 3, 2000, 64 Fed. Reg. 59642, as part of the Indiana SIP.

vi. 326 IAC 8-4-6(c)(5) provides that all vapor collection and control systems shall be retested for vapor leakage and blockage and shall pass the test at least once every five years.

Section 113(a)(1)-(3) of the CAA, 42 U.S.C. § 7413(a)(1)-(3), authorizes the Administrator to initiate an enforcement action whenever, on the basis of any available information, the Administrator finds that any person has violated or is in violation of a requirement or prohibition of, among others, any implementation plan or permit, Title I or Title V of the CAA, or any rule promulgated, issued or approved under Title I or Title V of the CAA.

II. EXPLANATION OF VIOLATIONS

The EPA found the following violations at the ArcelorMittal IHW Facility:

a. No. 3 Blast Furnace Opacity at Roof Monitor

Regulated by: Title V Permit, Sections C and E
Iron and Steel NESHAP, 40 C.F.R. § 63.7790(a), Tables 1 and 3
Indiana SIP 326 IAC 5-1-2(2)(B)

Sources: Quarterly Deviation and Compliance Monitoring Reports: 2nd-4th Quarters 2011; 1st-2nd Quarters 2012; 2nd Quarter 2013; 3rd Quarter 2014; 2nd-3rd Quarters 2018

Semiannual Deviation and Compliance Monitoring Reports: 1st-2nd Half 2011; 1st Half 2012; 1st Half 2013; 2nd Half 2014; First Half 2018

ArcelorMittal reported exceedances of the state and federal 20%, 6-minute average, opacity limits at the No. 3 Blast Furnace Roof Monitor for up to 28, 6-minute averaging periods in 2011; 2, 6-minute averaging periods in 2012; 1, 6-minute averaging period in 2013; 4, 6-minute averaging periods in 2014; 1, 6-minute averaging period in 2016, and 4, 6-minute averaging periods in 2018.

b. No. 3 Blast Furnace – Backdraft Stack Opacity

Regulated by: Title V Permit, Section C
Indiana SIP 326 IAC 5-1-2(2)(B)

Sources: Quarterly Deviation and Compliance Monitoring Report: 3rd Quarter 2011

ArcelorMittal reported an exceedance of the 20%, 6-minute average, source-wide state opacity limit at the No. 3 Blast Furnace Backdraft Stack for 1, 6-minute averaging period on 8/11/11.

c. No. 3 Blast Furnace – Dust Catcher Opacity

Regulated by: Title V Permit, Section C
Indiana SIP 326 IAC 5-1-2(2)(B)

Sources: Quarterly Deviation and Compliance Monitoring Report: 2nd Quarter 2014

ArcelorMittal reported an exceedance of the 20%, 6-minute average, source-wide state opacity limit at the No. 3 Blast Furnace Dust Catcher for 1, 6-minute averaging period on 4/21/2014.

d. No. 3 Blast Furnace – Stove Platform Opacity

Regulated by: Title V Permit, Section C
Indiana SIP 326 IAC 5-1-2(2)(B)

Sources: Quarterly Deviation and Compliance Monitoring Report: 2nd Quarter 2013

ArcelorMittal reported an exceedance of the 20%, 6-minute average, source-wide state opacity limit at the No. 3 Blast Furnace Stove Platform for 1, 6-minute averaging period on 4/3/2013.

e. No. 3 Blast Furnace – Incomplete Passive Emission Control Inspections/Records

Regulated by: Title V Permit, Section C
Indiana SIP 326 IAC 6.8-8

Sources: Quarterly Deviation and Compliance Monitoring Report: 3rd-4th Quarters 2011; 3rd Quarter 2013

ArcelorMittal reported:

i. Missing Casthouse production sheets that document the No. 3 Blast Furnace Passive Emission Control inspections were missing for 2 days in 2011 and 1 day in 2013; and

ii. Electrical inspections of the passive emission control hood hoist were not completed on 2 days in 2011.

f. No. 3 Blast Furnace – Intermittent Operation of Blast Furnace Waste Gas Flare / Pilot

Regulated by: Title V Permit, Section D

Sources: Quarterly Deviation and Compliance Monitoring Reports: 2nd, 4th Quarters 2011; 2nd-4th Quarters 2012; 2nd Quarter 2013; 2nd Quarter 2014; 4th Quarter 2017; 1st Quarter 2018

ArcelorMittal reported that the blast furnace waste gas flare or pilot was not lit on four days in 2011; 3 days in 2012; 4 days in 2013; 1 day in 2014; 2 days in 2017; and 2 days in 2018.

g. No. 4 Blast Furnace Opacity at Roof Monitor

Regulated by: Title V Permit, Sections C and E

Iron and Steel NESHAP, 40 C.F.R. §§ 63.7790(a), Tables 1 and 3
Indiana SIP 326 IAC 5-1-2(2)(B)

Source: Quarterly Deviation and Compliance Monitoring Reports: 2nd-4th Quarters 2010; 1st, 4th Quarters 2011; 1st Quarter 2013; 4th Quarter 2014; 1st-2nd Quarters 2015; 4th Quarter 2016

Semiannual Deviation and Compliance Monitoring Reports: 2nd half 2010; 1st-2nd half 2011; 1st Half 2013; 2nd Half 2014; 1st Half 2015; 2nd Half 2016

ArcelorMittal reported exceedances of the state and federal 20%, 6-minute average, opacity limits at the No. 4 Blast Furnace Roof Monitor for 4, 6-minute averaging periods in 2010; 12, 6-minute averaging periods in 2011; 1, 6-minute averaging period in 2013; 7, 6-minute averaging periods in 2014; and 5, 6-minute averaging periods in 2015; and 1, 6-minute averaging period in 2016.

h. No. 4 Blast Furnace – Stock House Opacity

Regulated by: Title V Permit, Section C
Indiana SIP 326 IAC 5-1-2(2)(B)

Sources: Quarterly Deviation and Compliance Monitoring Report: 1st Quarter 2011

ArcelorMittal reported an exceedance of the 20%, 6-minute average, source-wide state opacity limit at the No. 4 Blast Furnace Stock house for an intermittent duration during a fire on 1/7/2011 at the stock house M-1 conveyor that lasted approximately 3 hours.

i. No. 4 Blast Furnace –Backdraft Stack Opacity

Regulated by: Title V Permit, Section C
Indiana SIP 326 IAC 5-1-2(2)(B)

Sources: Quarterly Deviation and Compliance Monitoring Report: 3rd Quarter 2010; 2nd Quarter 2011

ArcelorMittal reported an exceedance of the 20%, 6-minute average, source-wide state opacity limit at the No. 4 Blast Furnace Backdraft Stack for 3, 6-minute averaging periods in 2010 and 1, 6-minute averaging period in 2011.

j. No. 4 Blast Furnace – Missed Continuous Compliance Plan Inspections

Regulated by: Title V Permit, Section C
Indiana SIP 326 IAC 6.8-8

Sources: Quarterly Deviation and Compliance Monitoring Reports: 2nd-3rd Quarters 2010; 1st-4th Quarters 2011; 3rd Quarter 2012; 2nd-4th Quarters 2017; 3rd Quarter 2018

ArcelorMittal reported that:

i. The monthly mechanical baghouse inspection was not completed once in 2010, and once in 2012;

ii. One weekly and one monthly baghouse inspection were not completed within the associated week/month on 2 days in 2011;

iii. A daily check of the No. 4 Blast Furnace waste gas bleeder flare was not completed on 6 days in 2011;

iv. Two daily and two weekly electrical inspections of the No. 4 Blast Furnace baghouse were not performed on 4 days in 2010 and one weekly electrical inspection was not performed in 2017;

v. Two weekly baghouse mechanical inspections were not performed in 2017; and one weekly mechanical inspection was not performed in 2018;

vii. The quarterly baghouse inspection was not performed in the third quarter 2017 and not all of the required inspection elements were completed in the first quarter of 2018;

viii. The monthly ductwork inspections were not performed in the third quarter of 2018.

k. No. 4 Blast Furnace – Incomplete Continuous Compliance Plan Inspection Records

Regulated by: Title V Permit, Section C
Indiana SIP 326 IAC 6.8-8

Sources: Quarterly Deviation and Compliance Monitoring Reports: 3rd-4th Quarters 2010; 1st, 3rd Quarters 2011; 2nd-4th Quarters 2012; 2nd-4th Quarters 2017; 1st Quarter 2018

ArcelorMittal reported that:

i. Paper records required by the Continuous Compliance Plan for three daily casthouse checklists, two daily and three weekly electrical inspections, 19 mechanical inspections, five weekly mechanical inspections, and one monthly mechanical inspection were missing in 2010; one daily electrical and three daily mechanical inspections, and one weekly electrical and two weekly mechanical inspections were missing in 2012; two daily mechanical inspections and one weekly electrical inspections were missing in 2017; and one daily and one weekly mechanical inspections were missing in 2018; and

ii. Visual checks of the blast furnace pilot flame were not recorded on 4 days in 2010.

l. No. 4 Blast Furnace VE Notations at Casthouse Baghouse

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 2-7-6

Source: Quarterly Deviation and Compliance Monitoring Report: 4th Quarter 2011

ArcelorMittal reported that it failed to perform VE notations once per day on 1 day in 2011.

m. No. 4 Blast Furnace – Daily Visible Emission Check Not Recorded

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 2-7-6

Sources: Quarterly Deviation and Compliance Monitoring Report: 3rd Quarter 2011

ArcelorMittal reported that daily visible emission checks were not recorded on the daily operating form on 3 days in 2011.

n. No. 4 Blast Furnace – Intermittent Operation of Blast Furnace Waste Gas Flare / Pilot

Regulated by: Title V Permit, Section D

Sources: Quarterly Deviation and Compliance Monitoring Reports: 2nd, 4th Quarter 2011; 4th Quarter 2012; 4th Quarter 2017; 1st Quarter 2018; 3rd Quarter 2018

ArcelorMittal reported that the blast furnace waste gas flare or pilot was not lit on 2 days in 2011, 2 days in 2012, 2 days in 2017, and 3 days in 2018.

o. No. 4 Blast Furnace – Baghouse Fan(s) Not Running

Regulated by: Title V Permit, Section D
Indiana SIP, 326 IAC 2-7-6(6)

Sources: Quarterly Deviation and Compliance Monitoring Reports: 2nd-4th Quarters 2010; 1st, 4th Quarters 2011; 2nd Quarter 2013; 2nd, 4th Quarter 2013; 2nd Quarter 2014; 2nd-4th Quarters 2017; 1st-2nd Quarters 2018

ArcelorMittal reported a failure to operate baghouse fan(s) associated with the No. 4 Blast Furnace for a total of 1.88 hours in 2010; 6.45 hours in 2011; 5.58 hours in 2013; 0.78 hours in 2014; 2.2 hours in 2017; 5.48 hours in 2018.

p. No. 4 Blast Furnace – Minimum Baghouse Fan Amp Operating Parameter

Regulated by: Title V Permit, Section E
Iron and Steel NESHAP, 40 C.F.R. §§ 63.7800(b), 63.7833(b)

Sources: Semiannual Deviation and Compliance Monitoring Reports: 2nd Half 2010; 1st-2nd Half 2011; 1st Half 2012; 1st-2nd Half 2013; 1st-2nd Half 2014; 2nd Half 2015; 1st Half 2016; 1st-2nd Half 2017; First Half 2018

ArcelorMittal reported deviations of the minimum baghouse fan amp operating parameter on 5 days in 2010; 4 days in 2011; 1 day in 2012; 5 days in 2013; 7 days in 2014; 4 days in 2016; 5 days in 2017; and 5 days in 2018.

q. No. 4 Blast Furnace – Blast Furnace Operation and Maintenance (O&M)

Regulated by: Title V Permit, Section E
Iron and Steel NESHAP, 40 C.F.R. §§ 63.7800(b), 63.7834

Sources: Semiannual Deviation and Compliance Monitoring Report: 1st-2nd Half 2010; 1st Half 2011; 2nd Half 2012; 2nd Half 2015; 1st Half 2016; 1st-2nd Half 2017; First Half 2018

ArcelorMittal reported that:

i. Troubleshooting and repair of baghouse corrective actions in response to No. 2 Fan motor failure were not completed within specified timeframe on one day in 2010;

ii. A monthly capture system inspection was not completed for the month of July 2010 and the months of July-September 2017;

iii. Records for two weekly electrical, seven weekly mechanical, 14 daily electrical, 54 daily mechanical inspections could not be located as prescribed in O&M Plan during the first half 2010;

iv. Operator failed to follow procedures for monitoring ladles while casting for 2 minutes on 8/30/2010;

v. Operators failed to follow standard operating practices when baghouse fans shut down during one cast in 2011 and two casts in 2017;

vi. Damper position faults occurred on 29 days in 2012 (west tilting runner damper); 17 days in 2015 (east tilting runner damper; east iron trough damper); 5 days in 2016 (east tilting damper); and 2 days in 2017 (east tilter damper);

vii. Bag Leak Detection inspections were missed for the fourth quarter 2017;

viii. The quarterly baghouse inspection reports were not fully completed for one quarter in 2018; and

ix. Baghouse dP calibrations were not completed late for one time in 2018.

r. No. 4 Blast Furnace – Baghouse Fan Amp Monitor Downtime

Regulated by: Title V Permit, Section E
Iron and Steel NESHAP, 40 C.F.R. §§ 63.7830(a)

Sources: Semiannual Deviation and Compliance Monitoring Report: 2nd Half 2010; 1st Half 2013

ArcelorMittal reported the No. 4 Blast Furnace baghouse fan amp monitor failed to operate for 9.6 hours in 2010 and 8.2 hours in 2013.

s. BOF Opacity at Roof Monitor

Regulated by: Title V Permit, Sections D and E
Iron and Steel NESHAP, 40 C.F.R. § 63.7790, Tables 1 and 3
Indiana SIP 326 IAC 6.8-2-21(b) (effective May 30, 2008)

Sources: Quarterly Deviation and Compliance Monitoring Report: 1st, 4th Quarters 2011; 1st, 3rd-4th Quarters 2012; 3rd-4th Quarters 2013; 2nd Quarter 2014; 2nd Quarter 2015; 4th Quarter 2016; 4th Quarter 2017; 2nd-3rd Quarters 2018

Semiannual Deviation and Compliance Monitoring Report: 1st-2nd Half 2011; 1st-2nd Half 2012; 2nd Half 2013; 1st Half 2014; 1st Half 2015; 2nd Half 2016; 2nd Half 2017; First Half 2018

ArcelorMittal reported exceedances of the federal 20%, 3-minute average, opacity limit at the No. 3 BOF Roof Monitor for 22, 3-minute averaging periods in 2011; 5, 6-minute averaging periods in 2012; 2, 3-minute averaging periods in 2013; 1, 3-minute averaging period in 2014; 1, 3-minute averaging period in 2015; 1, 3-minute averaging period in 2016; 4, 3-minute averaging periods in 2017; and 2, 3-minute averaging periods in 2018.

t. No. 3 BOF – Opacity at ESP Stack

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 6.8-2-21

Sources: Quarterly Deviation and Compliance Monitoring Reports: 1st-2nd, 4th Quarters 2011; 1st-4th Quarters 2012; 1st-4th Quarter 2013; 1st-4th Quarters 2014; 1st-2nd Quarters 2015; 1st-4th Quarters 2016; 1st-4th Quarters 2017; 1st-3rd Quarters 2018

ArcelorMittal reported exceedances of the 20%, 6-minute average, opacity limit at the No. 3 BOF ESP stack for 34, 6-minute averaging periods in 2011; 17, 6-minute averaging periods in 2012; 36, 6-minute averaging periods in 2013; 18, 6-minute averaging periods in 2014; 4, 6-minute averaging periods in 2015; 52, 6-minute averaging periods in 2016; 58, 6-minute averaging periods in 2017; and 14, 6-minute averaging periods in 2018.

u. BOF Stack – Continuous Opacity Monitor Downtime

Regulated by: Title V Permit, Section D

Source: Quarterly Deviation and Compliance Monitoring Reports: Third Quarter 2011

ArcelorMittal reported downtime of the ESP Continuous Opacity Monitor for a total of 63.8 hours in 2011.

v. No. 3 BOF Continuous Opacity Monitor Out of Control Period

Regulated by: Title V Permit, Section E
Iron and Steel NESHAP, 40 C.F.R. §§ 63.7830(d), 63.7832(a)

Source: Semiannual Deviation and Compliance Monitoring Report: 2nd Half 2011

ArcelorMittal reported that the No. 3 BOF monitoring system experienced out-of-control periods on 4 days in 2011.

w. No. 3 BOF – O&M and Continuous Compliance Plan Requirements

Regulated by: Title V Permit, Sections C and E
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Sources: Semiannual Deviation and Compliance Monitoring Report: 1st-2nd Half 2017; Quarterly Deviation Report: 3rd-4th Quarters 2017; 1st Quarter 2018

ArcelorMittal reported that:

i. the No. 3 BOF O&M cold startup procedure was not followed on one day in 2017;

ii. ArcelorMittal reported that monthly hopper heater inspections for the ESP were not performed in August or September 2017;

iii. ArcelorMittal reported that daily mechanical inspections of the ESP and HM/Desulf Baghouse were not performed on weekend days during the third quarter 2017 and the first 3 weekends of October 2017; and

iv. ArcelorMittal reported that weekly baghouse inspections for LMF and HM/Desulf were missed for 6 weeks and 8 weeks in 2017.

x. Gasoline Dispensing Facility Monitoring Requirements

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 8-4-6(c)(5)

Source: Quarterly Deviation and Compliance Monitoring Report: 4th Quarter 2015

ArcelorMittal reported a failure to retest vapor leakage and blockage within 5 years of previous test.

y. LMF – Baghouse Fan(s) Not Working

Regulated by: Title V Permit, Section D

Sources: Quarterly Deviation and Compliance Monitoring Report: 2nd Quarter 2012

ArcelorMittal reported that the LMF continued operating for 37 minutes on 4/28/2012 after both baghouse ID fans shut down due to an interlock that did not automatically stop the process.

z. LMF – Baghouse Stack Opacity

Regulated by: Title V Permit, Section D
Indiana SIP 326 IAC 6.8-2-21(b)

Sources: Quarterly Deviation and Compliance Monitoring Report: 1st Quarter 2012; 3rd Quarter 2014

ArcelorMittal reported intermittent exceedances of the state 5%, 3-minute average, opacity limit at the LMF Baghouse Stack during a 2.18 hour period on 3/27/2012, and during a 9.67 hour period on 8/27/2014.

aa. LMF – Roof Monitor Opacity

Regulated by: Title V Permit, Section E
Iron and Steel NESHAP, 40 C.F.R. § 63.7790(a), Tables 1 and 3

Sources: Semiannual Deviation and Compliance Monitoring Report: 1st-2nd Half 2010; 1st-2nd Half 2011

ArcelorMittal reported exceedances of the federal 20%, 3-minute average, opacity limit at the No. 3 BOF Ladle Metallurgy Roof Monitor for 27, 3-minute averaging periods in 2010; and 32, 3-minute averaging periods in 2011.

bb. Pugh Ladle Repair – Iron Beaching Opacity

Regulated by: Title V Permit, Section C
Indiana SIP 326 IAC 5-1-2(2)(B)

Sources: Quarterly Deviation and Compliance Monitoring Report: 4th Quarter 2010

ArcelorMittal reported an exceedance of the 20%, 6-minute average, source-wide state opacity limit at the Pugh Ladle Repair Shop while beaching iron for 1, 6-minute averaging period on 11/3/2010.

cc. Reladle/Desulf Baghouse – Roof Monitor Opacity

Regulated by: Title V Permit, Section E
Iron and Steel NESHAP, 40 C.F.R. §§ 63.7790(a), Tables 1 and 3

Sources: Semiannual Deviation and Compliance Monitoring Report: 1st Half 2011

ArcelorMittal reported an exceedance of the federal 20%, 3-minute average, opacity limit at the No. 3 BOF Reladle/Desulfurization Roof Monitor for 2, 3-minute averaging periods in 2011.

dd. Reladle/Desulf Baghouse – Control Device Operation

Regulated by: Title V Permit, Section D

Sources: Quarterly Deviation and Compliance Monitoring Report: 2nd Quarter 2016

ArcelorMittal reported that hot metal was poured for one minute without the baghouse fan in operation in 2016.

ee. No. 3 Pickle Line – Scrubber Water Flow Operating Parameters

Regulated by: Title V Permit, Section E
Steel Pickling NESHAP, 40 C.F.R. § 63.1162(a)

Sources: Semiannual Deviation and Compliance Monitoring Reports: First Half 2010; Second Half 2013

ArcelorMittal reported a failure to meet the minimum scrubber water hourly flow operating parameter for 9.5 hours in 2010 and 2.17 hours in 2013.

ff. No. 3 Pickle Line– Scrubber Water Flow Monitor Downtime

Regulated by: Title V Permit, Section E
Steel Pickling NESHAP, 40 C.F.R. § 63.1162(a)

Sources: Semiannual Deviation and Compliance Monitoring Reports: First-Second Half 2010; First-Second Half 2011; Second Half 2012; First-Second Half 2013; First Half 2014

ArcelorMittal reported scrubber water flow monitor downtime for a total of 50.3 hours in 2010; 89.3 hours in 2011; 46.1 hours in 2012; 117.8 hours in 2013; and 16 hours in 2014.

gg. No. 3 Pickle Line– HCI Emissions

Regulated by: Title V Permit, Section E
Steel Pickling NESHAP, 40 C.F.R. § 63.1157(a)(1)

Sources: Quarterly Deviation and Compliance Monitoring Report: 3rd Quarter 2013

Semiannual Deviation and Compliance Monitoring Report: 2nd Half 2013

ArcelorMittal reported HCl emissions above the 19 ppmv limit on 9/17/2013 at the No. 3 Pickle Line.

hh. No. 3 Pickle Line– Recordkeeping

Regulated by: Title V Permit, Section E
Steel Pickling NESHAP, 40 C.F.R. § 63.1165

Sources: Quarterly Deviation and Compliance Monitoring Report: 2nd Quarter 2010

ArcelorMittal reported that scrubber startup checklist records could not be located on two days in 2010.

ii. No. 8 Boiler – Boiler Stack Opacity

Regulated by: Title V Permit, Section C
Indiana SIP 326 IAC 5-1-2(2)(B)

Sources: Quarterly Deviation and Compliance Monitoring Report: 3rd quarter 2011; 2nd Quarter 2016

ArcelorMittal reported an exceedance of the 20%, 6-minute average, source-wide state opacity limit at the No. 8 Boiler Stack for 1, 6-minute averaging period on 6/13/2011; and 1, 6-minute averaging period on 4/18/2016.

jj. No. 3 BOF – Furnace Relief Damper Opacity

Regulated by: Title V Permit, Section C
Indiana SIP 326 IAC 5-1-2(2)(B)

Source: Quarterly Deviation and Compliance Monitoring Report: 3rd Quarter 2010

ArcelorMittal reported an exceedance of the 20%, 6-minute average, source-wide state opacity limit at the BOF Furnace No. 2 Relief Damper for 1, 6-minute averaging period on 7/1/2010.

III. ENVIRONMENTAL IMPACT OF VIOLATIONS

a. Violation of the opacity standards increases public exposure to unhealthy particulate matter. Particulate matter, especially fine particulate, contributes to respiratory problems, lung damage and premature deaths.

b. VOCs react with nitrogen oxides in the presence of sunlight to form ground-level ozone, which contributes to respiratory problems such as increased susceptibility to respiratory infection, pulmonary inflammation, painful deep breathing, aggravated asthma and reduced lung capacity.

c. Violations of the monitoring, recordkeeping, reporting and permitting requirements prevent the EPA from knowing whether an affected facility maintained compliance with the applicable emission standards.

3/21/19
Date

Edward Nam
Director
Air and Radiation Division

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAR 2 1 2019

REPLY TO THE ATTENTION OF

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

M. P. Madar
Vice President & General Manager
ArcelorMittal Cleveland LLC
3060 Eggers Avenue
Cleveland, Ohio 44105

Re: ArcelorMittal Cleveland LLC Notice of Violation and Finding of Violation

Dear Mr. Madar:

This is to advise you that the United States Environmental Protection Agency (EPA) has determined that ArcelorMittal Cleveland LLC (ArcelorMittal) located at 3060 Eggers Avenue in Cleveland, Ohio, (Cleveland Facility) is in violation of the Clean Air Act (the CAA) and associated state pollution control requirements.

The EPA is sending this Notice of Violation and Finding of Violation (NOV/FOV) to notify you that at the Cleveland Facility we have identified violations of the facility's Title V Permit, the National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities at 40 C.F.R. Part 63, Subpart FFFFF, the National Emission Standards for Hazardous Air Pollutants for Steel Pickling at 40 C.F.R. Part 63, Subpart CCC, and the Ohio State Implementation Plan.

Section 113 of the CAA gives the EPA several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action and bringing a judicial criminal action. The option we select, in part, depends on the efforts taken by ArcelorMittal to correct the alleged violations and the timeframe in which you can demonstrate and maintain continuous compliance with the requirements cited in the NOV/FOV.

Before we determine which enforcement option is appropriate, we are offering you the opportunity to request a conference with us about the violations alleged in the NOV/FOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

The EPA contact in this matter is Patrick Miller. You may contact Patrick Miller at 312-886-4044 if you wish to request a conference. Legal questions should be directed to Cynthia A. King, Associate Regional Counsel at 312-886-6831. The EPA hopes that this NOV/FOV will encourage ArcelorMittal's compliance with the requirements of the CAA.

Sincerely,

Edward Nam
Director
Air and Radiation Division

Enclosure

cc: Ms. Valencia White, Chief of Enforcement, Cleveland Division of Air Quality

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	
	)	
ArcelorMittal Cleveland LLC East Chicago, Indiana	)	**NOTICE OF VIOLATION AND FINDING OF VIOLATION**
	)	
Proceedings Pursuant to the Clean Air Act, 42 U.S.C. §§ 7401 et seq.	)	**EPA-5-19-OH-02**

NOTICE AND FINDING OF VIOLATION DRAFT

ArcelorMittal Cleveland LLC (ArcelorMittal) owns and operates an integrated steel mill at 3060 Eggers Avenue, Cleveland, Ohio (Cleveland Facility).

The EPA is sending this Notice of Violation and Finding of Violation (NOV/FOV) pursuant to Sections 113(a)(1) and (3) of the Clean Air Act (the CAA), 42 U.S.C. § 7413(a)(1) and (3), to notify ArcelorMittal that at the Cleveland Facility we have found violations of the facility's Title V Permit, the National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities at 40 C.F.R. Part 63, Subpart FFFFF (Iron and Steel NESHAP), the National Emission Standards for Hazardous Air Pollutants for Steel Pickling at 40 C.F.R. Part 63, Subpart CCC (Steel Pickling NESHAP), and the Ohio State Implementation Plan (SIP) requirements.

I. REGULATORY PROVISIONS

The permits and regulatory provisions relevant to this NOV/FOV are as follows

Title V

a. Title V of the CAA, 42 U.S.C. §§ 7661a-7661f, establishes an operating permit program for certain sources, including "major sources." Pursuant to Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), on July 21, 1992, 57 Fed. Reg. 32295, the EPA promulgated regulations establishing the minimum elements of a permit program to be administered by any air pollution control agency. These regulations are codified at 40 C.F.R. Part 70 and are known as the Title V permit program.

b. 40 C.F.R. § 70.2 defines "major source," in part, as any stationary source belonging to a single major industrial grouping and that directly emits or has the potential to emit 100 tons per year (tpy) of any air pollutant, as defined under Section 302 of the CAA, 42 U.S.C. § 7602.

c. 40 C.F.R. § 70.7(b) states that no source subject to Title V may operate the source except in compliance with a Title V permit.

d. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), states that after the effective date of any permit program approved or promulgated under Title V of the CAA, no source subject to Title V may operate the source except in compliance with its Title V permit.

e. The EPA approved Ohio's Title V permit program, codified at Ohio Administrative Code (OAC) Rule 3745-77, on August 15, 1995, 60 Fed. Reg. 42045, with an effective date of October 1, 1995.

f. The regulation at 40 C.F.R. § 70.6(b)(1) specifies that all terms and conditions in a permit issued under a Title V program, including any provisions designed to limit a source's potential to emit, are enforceable by the EPA under the CAA.

g. On August 15, 1995, 60 Fed. Reg. 42045, the EPA approved OAC 3745-77-07 which requires that each Title V Permit shall include all emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements.

h. On May 27, 1994, 59 Fed. Reg. 27464, the EPA approved OAC Rule 3745-17 as part of the federally enforceable SIP for the State of Ohio. OAC Rule 3745-17 regulates the emission of particulate matter from stationary sources.

i. On November 5, 2004, the Ohio Environmental Protection Agency (OEPA) issued Final Title V Permit No. 13-18-00-1613 to ISG Cleveland LLC, ArcelorMittal's predecessor.

j. Part I of ArcelorMittal's Title V Permit sets forth the record keeping and reporting requirements for the Cleveland Facility.

k. Part II.A.2 of ArcelorMittal's Title V Permit restates the applicable requirements f or 40 C.F.R. Subpart CCC – National Emission Standards for Hazardous Air Pollutants for Steel Pickling – HCl Process Facilities and Hydrochloric Acid Regeneration Plants.

l. Part II.A.4 of ArcelorMittal's Title V Permit restates the applicable requirements for 40 C.F.R. Subpart FFFFF – National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities.

m. Part III of ArcelorMittal's Title V Permit sets forth the terms and conditions for the emission units at the Cleveland Facility:

i. Part III.A.I.1 of ArcelorMittal's Title V Permit prohibits, in accordance with OAC 3745-17-07(A)(1), visible particulate emissions from any stack in excess of 20 percent opacity as a six-minute average for more than six consecutive minutes in any sixty minutes.

ii. Part III.A.I.1 of ArcelorMittal's Title V Permit prohibits, in accordance with 3745-17-07(B)(1), visible particulate emissions from any stack in excess of 20 percent opacity as a three-minute average.

iii. Part III.A.I.1 of ArcelorMittal's Title V permit requires that reasonably available control measures be used to minimize or eliminate visible emissions of fugitive dust.

iv. Part III.A.I.1. of ArcelorMittal's Title V Permit prohibits, in accordance with OAC 3745-17-07(B)(1), visible particulate emissions from any fugitive dust source in excess of 20 percent opacity as a three-minute average.

v. Part III.A.I.1. of ArcelorMittal's Title V Permit requires, under OAC 3745-17-08(B)(3), the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust.

vi. Part III.A.I.2.2.a.i. of ArcelorMittal's Title V requires that ArcelorMittal minimize or eliminate visible emissions of fugitive dust through the employment of reasonably available control measures including, but not limited to the use of a Passive Emission Control system.

vii. Part III.A.I.2.2.a of ArcelorMittal's Title V permit requires that reasonably available control materials include the use of hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust emissions from this emissions unit to the control equipment.

viii. Part III.A.I.2.2b of ArcelorMittal's Title V permit requires that reasonably available control measures shall be used to minimize or eliminate visible emissions of fugitive dust through the employment of enclosures, and the overall containment efficiency shall be sufficient to minimize or eliminate the visible emissions of fugitive dust to the extent possible with good engineering design.

ix. Part III.A.I.2.2b of ArcelorMittal's Title V permit requires that reasonably available control measures shall be used to minimize or eliminate visible emissions of fugitive dust, and specifies that the permittee shall use a spray system to minimize fugitive dust.

x. Part III.A.I.2.2c. of ArcelorMittal's Title V permit requires that there shall be no visible emissions of an opacity equal or greater than 5%, as a six-minute average, from any of the baghouse stacks.

xi. Part III.A.I.1. of ArcelorMittal's Title V permit requires that HCl concentrations in the exhaust gases shall not be in excess of 18 parts per million, by volume, or the HCl emission rate shall correspond to a collection efficiency of 97 percent or greater.

xii. Part III.A.I.1 of ArcelorMittal's Title V permit requires compliance with 40 C.F.R. Part 63, Subpart FFFFF, including the requirement to maintain a bag leak detection system in accordance with that subpart and monitor the pressure drop across each baghouse cell each day.

xiii. Part III.A.II.1 of ArcelorMittal's Title V permit requires that the baghouse control system must be operated to control particulate emissions.

xiv. Part III.A.III.1 of ArcelorMittal's Title V permit requires that daily records must be maintained, including records of any significant emissions generating incident.

xv. Part III.A.III.1 of ArcelorMittal's Title V permit requires that records of visible emissions checks shall be maintained in an operations log.

xvi. Part III.A.III.2 of ArcelorMittal's Title V permit requires that a continuous emission monitoring system be used and that it must be operated in accordance with 40 C.F.R. Part 60, Appendix B.

xvii. Part III.A.III.3 of ArcelorMittal's Title V permit requires that desulfurization operation records be maintained.

xviii. Part III.A.III.3 of ArcelorMittal's Title V permit requires that a continuous opacity monitor must be operated in accordance with procedures set forth in 40 C.F.R. Part 60.

xix. Part III.A.III.5 of ArcelorMittal's Title V permit requires that monitoring and recordkeeping requirements must be kept in accordance with 40 C.F.R. 63, Subpart FFFFF.

xx. Part III.A.III.6 of ArcelorMittal's Title V permit requires that an alarm system shall be used to alert the blast furnace operator when the pilot flame for the waste gas flare is not lit, and that equipment is used to monitor the position of the waste gas bleeder valve.

xxi. ArcelorMittal's Title V permit requires that ArcelorMittal submit compliance monitoring reports which are certified to be true, accurate and complete.

Iron and Steel NESHAP

a. The Cleveland Facility is subject to the Iron and Steel NESHAP, 40 C.F.R. Part 63, Subpart FFFFF.

b. The following requirements are found in the Iron and Steel NESHAP:

i. 40 C.F.R. § 63.7790(a) - You must meet each emission limit and opacity limit in Table 1 to this subpart that applies to you;

ii. 40 C.F.R. § 63.7800(a) - You must at all times operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart;

iii. 40 C.F.R. § 63.7800(b) - You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in § 63.7790(b);

iv. 40 C.F.R. § 63.7830 - You must install, operate, and maintain a bag leak detection system and monitor the pressure drop across each baghouse cell each day.

v. 40 C.F.R. § 63.7831 - You must install, operate, and maintain the bag leak detection system according to the requirements identified in this section, including the requirement to equip the system with an alarm. You must install, operate, and maintain each opacity monitoring system in accordance with this section.

vi. 40 C.F.R. § 63.7833(a) - You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in 40 C.F.R. § 63.7790(a) by meeting the requirements in Table 3 to this subpart (which specifies opacity limits associated with certain equipment).

vii. 40 C.F.R. § 63.7834 - You must demonstrate compliance for each capture system and control device with the operation and maintenance requirements by meeting the requirements identified in this section, including the requirement to record all information associated with specified monitoring.

viii. 40 C.F.R. § 63.7842 requires that sources must document and maintain records of certain information related to its equipment, including startups, shutdowns and malfunctions of that equipment.

Steel Pickling NESHAP

a. The Cleveland Facility is subject to the Steel Pickling NESHAP, 40 C.F.R. Part 63, Subpart CCC.

b. The following requirements are found in the Steel Pickling NESHAP:

i. 40 C.F.R. § 63.1157(a)(2) requires that owners or operators must not discharge HCl at a mass emission rate that corresponds to a collection efficiency of less than 97 percent.

ii. 40 C.F.R. § 63.1160(b)(1) requires an inspection of each scrubber at least once every three months.

iii. 40 C.F.R. § 63.1162(c) requires flow monitors for wet scrubbers for continuous monitoring and requires that HCl storage tank inspections must be completed once every two years.

Ohio SIP

a. On October 1, 1982, 47 Fed. Reg. 4375, the EPA approved OAC 3745-15-06 as part of the federally enforceable SIP for the State of Ohio. OAC Rule 3745-15-06 addresses requirements related to the malfunction and scheduled maintenance of air pollution control equipment.

b. On May 27, 1994, 59 Fed. Reg. 27464, the EPA approved OAC Rule 3745-17 as part of the federally enforceable SIP for the State of Ohio. OAC Rule 3745-17 regulates the emission of particulate matter from stationary sources.

c. OAC 3745-17-07(A)(1) prohibits visible particulate emissions from any stack in excess of 20 percent opacity as a six-minute average. Opacity may exceed 20 percent, but not more than 60 percent, as a six-minute average once in any sixty-minute period.

d. OAC 3745-17-07(B)(1) prohibits visible particulate emissions from any fugitive dust source in excess of 20 percent opacity as a three-minute average.

e. OAC 3745-17-08(B) prohibits fugitive dust sources to be operated without taking reasonably available control measures to prevent fugitive dust from becoming airborne and requires the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust.

f. On May January 1, 2003, 68 Fed. Reg. 2909, the EPA approved OAC Rule 3745-31 as part of the federally enforceable SIP for the State of Ohio. OAC Rule 3745-31 regulates Permits-to-Install New Sources and the Permits-to-Install and Operate Program.

Section 113(a)(1)-(3) of the CAA, 42 U.S.C. § 7413(a)(1)-(3), authorizes the Administrator to initiate an enforcement action whenever, on the basis of any available information, the Administrator finds that any person has violated or is in violation of a requirement or prohibition of, among others, any implementation plan or permit, Title I or Title V of the CAA, or any rule promulgated, issued or approved under Title I or Title V of the CAA.

II. EXPLANATION OF VIOLATIONS

The EPA found the following violations at the ArcelorMittal Cleveland Facility:

a. #1 BOF Shop Hot Metal Transfer (F011) Operation without Controls

Regulated by: Title V Permit, Part III
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)
Ohio SIP OAC 3745-17-08(B)(3)

Sources: Quarterly Deviation and Compliance Monitoring Reports: Third-Fourth Quarter 2010; First, Second and Third Quarter 2011; Second Quarter 2012; Third Quarter 2013; Second Quarter 2015; No. 1 BOF Shop malfunction notices: 8/13/10, 8/19/10, 10/26/10, 11/16/10, 2/3/11, 4/5/11, 7/7/11, 7/18/11, 9/30/11, 6/26/12, 7/2/12, 9/3/13, 6/17/15, 11/28/16, 12/8/16, 5/23/18

ArcelorMittal reported that hot metal was transferred or skimmed without controls for 33 heats and 1 partial heat in 2010; 29 heats in 2011; 4 heats in 2012; 3 heats in 2013; 4 heats in 2015; 12 heats in 2016 and 7 heats in 2018. In 2016, 15 heats were skimmed with partial controls.

b. #1 BOF (F011) Hot Metal Transfer Baghouse Excess Opacity via COMS

Regulated by: Title V Permit, Part III
Ohio SIP OAC 3745-17-07(A)

Sources: Quarterly Deviation and Compliance Monitoring Reports: First Quarter 2010; Third Quarter 2013; First Quarter 2015; Second Quarter 2017

ArcelorMittal reported 4 exceedances of the 20%, 6-minute hot metal transfer baghouse opacity limit between April 1, 2011 and December 31, 2017.

c. #1 BOF Shop (F011) Hot Metal Transfer Baghouse Failure to Meet Draft Static Pressure Hourly Average Minimum (Operation and Maintenance)

Regulated by: Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Sources: Iron and Steel NESHAP Semiannual Reports: First-Second Half 2011; First Half 2012; First-Second Half 2013; First Half 2014; First-Second Half 2015; First Half 2016

ArcelorMittal reported a failure to maintain minimum hourly average draft static pressure at the hot metal transfer baghouse for a total of 44 hours in 2010; 94 hours in 2011; 29 hours in 2012; 3 hours in 2013; 4 hours in 2014; 17 hours in 2015; and 4 hours in 2016.

d. #1 BOF Shop (P905) Operation and Maintenance Plan

Regulated by: Title V Permit, Part III
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Sources: Iron and Steel NESHAP Semiannual Reports: First Half 2011; Second Half 2011; First Half 2012

ArcelorMittal reported that it failed to maintain damper positions in accordance with the #1 BOF Shop Operation and Maintenance Plan for 8 days in 2011 and 4 days in 2012 due to damper trials.

e. #1 BOF Shop (P906) Operation and Maintenance Plan

Regulated by: Title V Permit, Part III
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Sources: Iron and Steel NESHAP Semiannual Report: First Half 2011; Second Half 2011; First Half 2012; First Half 2017

ArcelorMittal reported that it failed to maintain damper positions in accordance with the #1 BOF Shop Operation and Maintenance Plan for 11 days in 2011; 4 days in 2012; and for 9 days in 2017.

f. #1 BOF Shop (P905/P906) Particulate Emission Limitation (0.03 gr/dscf)

Regulated by: Title V Permit, Part III
Iron and Steel NESHAP, 40 C.F.R. § 63.7790(a), Table 1

Sources: Iron and Steel NESHAP Semiannual Reports: Second Half 2011; Second Half 2014; #1 BOF Shop malfunction notice: 11/3/11

ArcelorMittal reported emission limit exceedances on October 20-21, 2011; and on September 30 - October 3, 2014.

g. #1 BOF Shop (P906) Reasonably Available Control Measures

Regulated by: Title V Permit, Part III

Sources: Quarterly Deviation and Compliance Monitoring Report, Fourth Quarter 2015; #1 BOF Shop malfunction notice: 9/24/15

ArcelorMittal reported that visible particulate emissions of fugitive dust occurred on September 18, 2015.

h. #1 BOF Shop (F011) Opacity Monitor Downtime

Regulated by: Title V Permit, Part III

Sources: Quarterly Deviation and Compliance Monitoring Reports: First and Second Quarter 2013; First and Second Quarter 2014; First and Fourth Quarters 2016; First, Second, and Fourth Quarters 2017

ArcelorMittal reported that the No. 1 BOF Shop continuous opacity monitor experienced downtime for a total of 45.3 hours in 2013; 24.7 hours in 2014; 86.03 hours in 2016; and 60.5 hours in 2017.

i. #1 BOF Shop (F011) Static Pressure Recordkeeping

Regulated by: Title V Permit, Part III
Iron and Steel NESHAP, 40 C.F.R. §§ 63.7800, 63.7842

Sources: Iron and Steel NESHAP Semiannual Reports: Second Half 2012, Second Half 2015

ArcelorMittal reported that hourly average static pressure values were erroneously or not recorded on 2 days in 2012 and on 3 days in 2015.

j. #1 BOF Shop (F011) Malfunction Reporting

Regulated by: Title V Permit, Part I
Ohio SIP OAC 3745-15-06

Source: 2011 Annual Compliance Certification

ArcelorMittal reported that it failed to immediately report a malfunction at the #1 BOF Shop that caused a 20%, 6-minute opacity exceedance on April 22, 2011.

k. #1 BOF Shop (P906) Recordkeeping of Corrective Actions for Differential Pressure Deviations

Regulated by: Title V Permit, Part III
Iron and Steel NESHAP, 40 C.F.R. §§ 63.7833, 63.7834

Source: Iron and Steel NESHAP Semiannual Report: Second Half 2014; First Half 2018

ArcelorMittal reported that on 2 days in 2014 it failed to record corrective actions taken in response to differential pressure readings that were out of range.

ArcelorMittal reported a failure to determine the cause of a differential pressure alarm within an hour as required in the Corrective Action Plan Procedure in 2018.

l. #1 BOF Shop (P906) Minimum Hourly Scrubber Differential Pressure

Regulated by: Title V Permit, Part III
Iron and Steel NESHAP, 40 C.F.R. §§ 63.7800, 63.7833

Sources: Iron and Steel NESHAP Semiannual Reports: Second Half 2013, Second Half 2014

ArcelorMittal reported a failure to maintain minimum hourly average scrubber pressure differential at the No. 1 BOF Shop for a total of 3 hours in 2013 and 2 hours in 2014.

m. # 2 BOF Shop (F209) Recordkeeping

Regulated by: Title V Permit, Part III

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second and Fourth Quarter 2014

ArcelorMittal reported that it failed to maintain desulfurization records for all the heats processed during the second and fourth quarters of 2012.

n. #2 BOF Shop (P925/P926) Control Equipment Operation

Regulated by: Title V Permit, Part III
Ohio SIP OAC 3745-17-08(B)

Sources: Quarterly Deviation and Compliance Monitoring Reports: First Quarter 2013; Third Quarter 2014; First Quarter 2015; #2 BOF Shop malfunction notices: 7/31/14, 2/9/15

ArcelorMittal reported that, on January 27, 2013, a power outage during tapping prevented operation of the Electrostatic Precipitator (ESP) during final minutes of the tap; on July 21, 2014, a swing shield failure rendered the shield inoperable for two heats; on August 26, 2014, an ESP fan failure occurred; and on February 4, 2015, failure of the swing shield rendered the shield inoperable for nine heats.

o. #2 BOF Shop (F210) Raw Materials Handling, Operation Without Controls

Regulated by: Title V Permit, Part III
Ohio SIP OAC 3745-17-08(B)

Source: Quarterly Deviation and Compliance Monitoring Report: Second Quarter 2012

ArcelorMittal reported that on May 18, 2012 the raw material handling belt was operating without the benefit of baghouse draft.

p. #2 BOF Shop (F209) BLDS Operation and Maintenance

Regulated by: Iron and Steel NESHAP, 40 C.F.R. § 63.7830

Sources: Iron and Steel NESHAP Semiannual Reports: First Half and Second Half 2014; First Half 2015; First Half 2016

ArcelorMittal reported intermittent operation of the bag leak detection, audible alarms, and/or differential pressure recordings during 2014, 2015, and 2016.

q. #2 BOF Shop (F209) Opacity Limits

Regulated by: Title V Permit, Part III
Iron and Steel NESHAP, 40 C.F.R. § 7790
Ohio SIP OAC 3745-31-05(A)(3)

Source: Quarterly Deviation and Compliance Monitoring Report: Fourth Quarter 2015

ArcelorMittal reported opacity exceedances for one heat on December 26, 2015 and four heats on December 27, 2015.

r. #2 BOF Shop (P925/P926) Excess Opacity at Roof Monitor

Regulated by: Title V Permit, Part III
Iron and Steel NESHAP, 40 C.F.R. § 63.7790(a), Tables 1 and 3
Ohio SIP OAC 3745-17-07(B)(1)

Source: Quarterly Deviation and Compliance Monitoring Report: Third Quarter 2012; Iron and Steel NESHAP Semiannual Report: Second Half 2012

ArcelorMittal reported a 32% opacity exceedance at the No. 2 BOF Shop roof monitor on September 27, 2012.

s. #2 BOF Shop (P925/P926) North and South Stack ESP Excess Opacity via Continuous Opacity Monitoring Systems

Regulated by: Title V Permit, Part III
Ohio SIP OAC 3745-17-07(A)(1)

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second and Fourth Quarter 2012; First- Fourth Quarters 2013; First, Second and Third Quarter 2014, First, Second, and Third Quarter 2015, First, Second, Third, and Fourth Quarters 2016; First, Second, and Fourth Quarters 2017; First-Third Quarters 2018; #2 BOF Shop malfunction notices: 5/25/12, 2/6/13, 3/1/13, 7/10/13, 8/15/13, 10/17/13, 2/26/14, 9/9/14, 6/3/15, 6/17/15, 12/2/15

ArcelorMittal reported exceedances of the 20%, 6-minute ESP opacity limit at the North Stack for 12, 6-minute averaging periods in 2013; 33, 6-minute averaging periods in 2014; 10, 6-minute averaging periods in 2015; 13, 6-minute averaging periods in 2016; 5, 6-minute averaging periods in 2017; and 10, 6-minute averaging periods in 2018.

ArcelorMittal reported exceedances of the 20%, 6-minute ESP opacity limit at the South Stack for 2, 6-minute averaging periods in 2012; 20, 6-minute averaging periods in 2013; 20, 6-minute averaging periods in 2014; 33, 6-minute averaging periods in 2015; 9, 6-minute averaging periods in 2016; 7, 6-minute averaging periods in 2017; and 12, 6-minute averaging periods in 2018.

t. #2 BOF Shop (P925/P926) Opacity Monitor Downtime

Regulated by: Title V Permit, Part III

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second and Fourth Quarters 2012; First-Fourth Quarters 2013; First-Fourth Quarters 2014; First-Fourth Quarters 2015; First and Fourth Quarters 2016; Third Quarter 2017; First-Second Quarters 2018

ArcelorMittal reported that the No. 2 BOF Shop continuous opacity monitor experienced downtime for a total of 12.7 hours in 2012; 49.2 hours in 2013; 35.8 hours in 2014; 18.3 hours in 2015; 2.8 hours in 2016; 0.2 hours in 2017; and 7.7 hours in 2018.

u. #2 BOF Shop (F209) Skimming Hot Metal Without Controls

Regulated by: Title V Permit, Part III.
Ohio SIP OAC 3745-17-08(B)(3)

Sources: Quarterly Deviation and Compliance Monitoring Reports: Fourth Quarter 2012; Third and Fourth Quarters 2013; First and Third Quarters 2014; First, Second and Third Quarters 2015

#2 BOF Shop malfunction notices: 12/19/12, 9/3/13, 10/30/13, 11/6/13, 2/26/14, 4/10/14, 7/31/14, 3/25/15, 5/19/15, 8/3/15, 2/24/17, 5/22/17, 8/8/17

ArcelorMittal reported that hot metal was skimmed without controls for 7 heats in 2012; 11 heats in 2013; 13 heats in 2014; 10 heats in 2015; and 6 heats in 2017.

v. #2 BOF Shop (925/P926) Continuous Opacity Monitor Out-of-Control

Regulated by: Title V Permit, Part III
Iron and Steel NESHAP, 40 C.F.R. § 63.7831

Sources: Iron and Steel NESHAP Reports: First and Second Half 2013

ArcelorMittal reported continuous opacity monitor out-of-control periods during 56.8 hours in 2013.

w. C5 (P903) Blast Furnace Casthouse Operation without Controls

Regulated by: Title V Permit, Part III
Iron and Steel NESHAP, 40 C.F.R. §§ 63.7800(b), 63.7790(a)
Ohio SIP OAC 3745-17-08(B)(3)

Sources: Iron and Steel NESHAP Semiannual Reports: First Half 2011;
C5 Blast Furnace malfunction notice: 3/14/11

ArcelorMittal reported that casting at C5 Blast Furnace occurred without the use of a trough cover for 2 casts on March 7, 2011.

x. C5 Blast Furnace (P903) Pilot Light Not Lit/Undetermined if Pilot Light Lit

Regulated by: Title V Permit, Part III

Sources: Quarterly Deviation and Compliance Monitoring Reports: Fourth Quarter 2013; First and Fourth Quarters 2014; First Quarter 2015; Second Quarter 2016; First, Second, and Fourth Quarters 2017; First Quarter 2018

ArcelorMittal reported that the C5 Blast Furnace waste gas flare pilot light was either not lit or it was undetermined if pilot light lit for periods of time on 4 days in 2013; 9 days in 2014, 1 day in 2015; 1 day in 2016; 4 days in 2017; and 1 day in 2018.

y. C5 Blast Furnace (P903) Pilot Light Monitoring

Regulated by: Title V Permit, Parts I and III

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second 2014; First and Fourth Quarters 2015; Second Quarter 2017; Second Quarter 2018

ArcelorMittal reported communication losses with the C5 Blast Furnace waste gas flare pilot loss sensor on one day in 2014; 4 days in 2015; 2 days in 2017; and 1 day in 2018.

z. C5 Blast Furnace (P903) Recordkeeping of Emissions Incidents

Regulated by: Title V Permit, Part III

Source: Quarterly Deviation and Compliance Monitoring Report: Fourth Quarter 2014

ArcelorMittal reported that it failed to record the presence or absence of an emissions incident on November 12, 2014.

aa. C6 Blast Furnace (P904) Pilot Light not Lit/Undetermined if Pilot Light Lit

Regulated by: Title V Permit, Part III.

Sources: Quarterly Deviation and Compliance Monitoring Reports: Fourth Quarter 2014; First and Second Quarter 2015; Second, Third, and Fourth Quarters 2016; First and Second Quarters 2017

ArcelorMittal reported that the C6 Blast Furnace waste gas flare pilot light was either not lit or it was undetermined if the pilot light was lit for periods of time on 1 day in 2014; 6 days in 2015; 4 days in 2016; and 3 days in 2017.

bb. C6 Blast Furnace (P904) Pilot Light Monitoring

Regulated by: Title V Permit, Part III.

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second Quarter 2014; First, Second, Fourth Quarters 2015; Second Quarter 2017; and Second Quarter 2018

ArcelorMittal reported communication losses with the C6 Blast Furnace waste gas flare pilot loss sensor on one day in 2014; 6 days in 2015; 2 days in 2017; and 1 day in 2018.

cc. C6 Blast Furnace (P904) Recordkeeping of Emissions Incidents

Regulated by: Title V Permit, Part III

Source: Quarterly Deviation and Compliance Monitoring Report: Fourth Quarter 2014

ArcelorMittal reported that it failed to record the presence or absence of an emissions incident on November 12, 2014.

dd. C6 (P904) Blast Furnace Casthouse Operation without Controls

Regulated by: Title V Permit, Part III
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)
Ohio SIP OAC 3745-17-08(B)(3)

Sources: Iron and Steel NESHAP Semiannual Reports: Second Half 2011, First Half 2015; Quarterly Deviation and Compliance Monitoring Reports: Third Quarter 2011; First Quarter 2015; Second Quarter 2018; C6 Blast Furnace malfunction notices: 9/12/11, 1/8/15, 5/25/18

ArcelorMittal reported that casting at C6 Blast Furnace occurred without the use of a trough cover for 1 cast on September 2, 2011 and 1 cast on January 3, 2015; and on May 25, 2018 one cast occurred without a hood for a portion of the cast.

ee. C5/C6 Blast Furnace Unloading Ore & Limestone (F003)

Regulated by: Title V Permit, Part III

Source: Quarterly Deviation and Compliance Monitoring Report: Fourth Quarter 2010

ArcelorMittal reported that it failed to use water spray to minimize fugitives during ore unloading from vessel on August 4, 2010 between 10:00-10:20 am.

ff. Boiler D (B002) Late Malfunction Reporting

Regulated by: Title V Permit, Part I
Ohio SIP OAC 3745-15-06

Source: 2010 Annual Compliance Certification

ArcelorMittal reported that it failed to include a malfunction reported on April 19, 2010 in the Quarterly Deviation and Compliance Monitoring Report for the second quarter of 2010.

gg. #1 Ladle Metallurgy Facility (P072) Baghouse Fan Operation

Regulated by: Title V Permit, Part III

Sources: Quarterly Deviation and Compliance Monitoring Reports: Third Quarter 2007; Fourth Quarter 2010; Second and Third Quarters 2012; Second and Third Quarters 2013; #1 LMF malfunction notices: 7/2/12, 10/1/12, 4/12/13, 5/29/13, 8/15/13

ArcelorMittal reported operation of the No. 1 Ladle Metallurgy Facility with one baghouse fan down for 7.5 hours in 2012 and 26.5 hours in 2013; and operation with two baghouse fans down for 24 minutes in 2010; 20 minutes in 2012; and 22 minutes in 2013.

hh. #2 Ladle Metallurgy Facility (P267) BLDS Operation and Maintenance (O&M) Requirements

Regulated by: Title V Permit, Part III
Iron and Steel NESHAP, 40 C.F.R.§ 63.7831

Sources: Iron and Steel NESHAP Reports, First Half 2013; First and Second Half 2014; Second Half 2017

ArcelorMittal reported that it failed to record baghouse daily differential pressure readings during the daily inspections from May 22-30, 2012, and that the audible bag leak detection system alarms were not functioning from January 1, 2014 - July 28, 2014.

ArcelorMittal reported the BLDS was inoperable from July 20, 2017- August 23, 2017.

ii. #2 Ladle Metallurgy Facility (P267) Baghouse Fan Operation

Regulated by: Title V Permit, Part III.
Ohio SIP OAC 3745-17-07(B)

Sources: Quarterly Deviation and Compliance Monitoring Reports: First Quarter 2013; Third Quarter 2014; #2 LMF malfunction notices: 1/15/13, 8/28/14, 5/31/18

ArcelorMittal reported that operation of the No. 2 Ladle Metallurgy Facility occurred without the benefit of one baghouse fan during 1 day in 2013; 1 day in 2014; and 1 day in 2018.

jj. 84" Pickle Line (P051) Fume Scrubber Flow Limits

Regulated by: Title V Permit, Part III
Steel Pickling NESHAP, 40 C.F.R. § 63.1157(a)(2)

Sources: Steel Pickling NESHAP Reports: First Half 2010; First and Second Half 2011; First and Second Half 2012; First and Second Half 2013; First and Second Half 2014; Second Half 2015; First and Second Half 2016; Second Half 2017; First Half 2018

ArcelorMittal reported that it failed to maintain minimum scrubber water flow hourly limits for 3 hours in 2010; 11 hours in 2011; 10 hours in 2012; 6 hours in 2013; 13 hours in 2014; 10 hours in 2015; 8 hours in 2016; 5 hours in 2017; and 1 hour in 2018.

kk. 84" Pickle Line (P051) Fume Scrubber Flow Monitor Downtime

Regulated by: Title V Permit, Part III
Steel Pickling NESHAP, 40 C.F.R. § 63.1162(a)(2)

Sources: Steel Pickling NESHAP Reports: Second Half 2010; First and Second Half 2011; Second Half 2013; First Half 2014; First and Second Half 2016; First and Second Half 2017; First Half 2018

ArcelorMittal reported that the fume scrubber flow monitor failed to operate for 4 hours in 2010; 11 hours in 2011; 5 hours in 2013; >1 hour in 2014; 27 hours in 2016; 11 hours in 2017; and 4 hours in 2018.

ll. 84" Pickle Line (P051) Late Scrubber Inspection

Regulated by: Title V Permit, Part II
Steel Pickling NESHAP, 40 C.F.R. § 63.1160(b)(2)

Source: Steel Pickling NESHAP Report: First Half 2010

ArcelorMittal reported that in 2010 it completed the mechanical aspects of the second quarter scrubber inspection late.

mm. 84" Pickle Line (P051) Late HCl Tank Inspection

Regulated by: Title V Permit, Part II
Steel Pickling NESHAP, 40 C.F.R. § 63.1162(c)

Source: Steel Pickling NESHAP Report: First Half 2010

ArcelorMittal reported that in 2010 it completed the HCl storage tank inspection late.

nn. Caster (P266) Recordkeeping

Regulated by: Title V Permit, Part III

Source: 2013 Annual Compliance Certification

ArcelorMittal reported that it failed to record the visible emissions check on February 8, 2013.

oo. #1 Ladle Metallurgy Facility (P072) Baghouse Operation and Maintenance

Regulated by: Iron and Steel NESHAP, 40 C.F.R. § 63.7800

Source: Iron and Steel NESHAP Report, Second Half 2017; First Half 2018

ArcelorMittal reported one missed monthly inspection and one missed quarterly inspection for the Fourth Quarter 2017; and three missed daily inspections and two incomplete quarterly inspections in 2018.

pp. #1 BOF Shop Emission Capture Baghouse (F011) O&M Requirements

Source: Iron and Steel NESHAP Semiannual Reports: First Half 2018

ArcelorMittal reported a late monthly inspection in 2018.

qq. #2 BOF Shop (P925/P926) North and South Stack ESP O&M Requirements

Source: Iron and Steel NESHAP Semiannual Reports: First Half 2018

ArcelorMittal reported:

34 instances where corrective actions were not documented to have been initiated within one hour for determining the cause of the hourly operating limit exceedance at the North ESP Stack; and

13 instances where corrective actions were not documented to have been initiated within one hour for determining the cause of the hourly operating exceedance at the South ESP Stack.

rr. 84" Pickle Line (P051) SSM Plan

Source: NESHAP Semiannual Reports: First Half 2018

ArcelorMittal reported that the shutdown of the 84" pickle line scrubber on the emission unit was not completed in accordance with procedures set forth in the SSM plan in 2018.

III. ENVIRONMENTAL IMPACT OF THE VIOLATIONS

a. Violation of the opacity standards increases public exposure to unhealthy particulate matter. Particulate matter, especially fine particulate, contributes to respiratory problems, lung damage and premature deaths.

b. Violations of the monitoring, recordkeeping, reporting and permitting requirements prevent the EPA from knowing whether a facility has maintained compliance with the applicable regulatory and emission standards.

3/21/19
Date

Edward Nam
Director
Air and Radiation Division

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAR 2 1 2019

REPLY TO THE ATTENTION OF

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

John D. Mengel
Vice President/General Manager
ArcelorMittal Burns Harbor, LLC
250 West U.S. Highway 12
Burns Harbor, Indiana 46304

Re: ArcelorMittal Burns Harbor, LLC Notice of Violation and Finding of Violation

Dear Mr. Mengel:

This is to advise you that the United States Environmental Protection Agency (EPA) has determined that the ArcelorMittal Burns Harbor, LLC facility located at 250 West U.S. Highway 12, Burns Harbor, Indiana (Burns Harbor Facility) is in violation of the Clean Air Act (the CAA) and associated state pollution control requirements.

The EPA is sending this Notice of Violation and Finding of Violation (NOV/FOV) to notify you that at the Burns Harbor Facility we have identified violations of the facility's Title V Permit, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coke Oven Batteries, 40 C.F.R. Part 63, Subpart L; the NESHAP for Integrated Iron and Steel Manufacturing Facilities at 40 C.F.R. Part 63, Subpart FFFFF; the NESHAP for Coke Ovens: Pushing, Quenching, and Battery Stacks at 40 C.F.R. Part 63, Subpart CCCCC; the NESHAP for Steel Pickling - HCL Processing Facilities and Hydrochloric Acid Regeneration Plants at 40 C.F.R. Part 63, Subpart CCC; and the Indiana State Implementation Plan.

Section 113 of the CAA gives us several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action and bringing a judicial criminal action. The option we select, in part, depends on the efforts taken by ArcelorMittal to correct the alleged violations and the timeframe in which you can demonstrate and maintain continuous compliance with the requirements cited in the NOV/FOV.

Before we determine which enforcement option is appropriate, we are offering you the opportunity to request a conference with us about the violations alleged in the NOV/FOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

The EPA contact for this matter is Patrick Miller. You may call him at 312-886-4044 if you wish to request a conference. Legal questions should be directed to Cynthia A. King, Associate Regional Counsel, at 312-886-6831. The EPA hopes that this NOV/FOV will encourage ArcelorMittal's compliance with the requirements of the CAA.

Sincerely,

Edward Nam
Director
Air and Radiation Division

Enclosure

cc: Phil Perry
Office of Enforcement Air Section
Indiana Department Environmental Management
100 North Senate Avenue, Room 1001
Indianapolis, Indiana 46206-6015

UNITED STATES ENVIRONMENTAL PROTECTIONS AGENCY
REGION 5

IN THE MATTER OF:	)	
	)	
ArcelorMittal Burns Harbor, LLC	)	**NOTICE OF VIOLATION AND**
Burns Harbor, Indiana	)	**FINDING OF VIOLATION**
	)	
Proceedings Pursuant to the	)	**EPA-5-19-IN-06**
Clean Air Act,	)	
42 U.S.C. §§ 7401 et seq.	)	
	)	

NOTICE AND FINDING OF VIOLATION

ArcelorMittal Burns Harbor, LLC (ArcelorMittal) owns and operates an iron and steel manufacturing facility located at 250 West U.S. Highway 12 in Burns Harbor, Indiana (Burns Harbor Facility).

The U.S. Environmental Protection Agency (EPA) is sending this Notice and Finding of Violation (NOV/FOV) to ArcelorMittal pursuant to Sections 113(a)(1) and (3) of the Clean Air Act (CAA), 42 U.S.C. § 7413(a)(1) and (3), to notify ArcelorMittal that at the Burns Harbor Facility we have identified violations of the facility's Title V permit, the National Emission Standards for Hazardous Air Pollutants for Coke Oven Batteries, 40 C.F.R. Part 63, Subpart L (Coke Oven NESHAP); the NESHAP for Integrated Iron and Steel Manufacturing Facilities at 40 C.F.R. Part 63, Subpart FFFFF (Iron and Steel NESHAP); the NESHAP for Coke Ovens: Pushing, Quenching and Battery Stacks at 40 C.F.R. Part 63, Subpart CCC (Coke Oven PQBS NESHAP); the NESHAP for Steel Pickling-HCL Processing Facilities and Hydrochloric Acid Regeneration Plants at 40 C.F.R. Part 63, Subpart CCCCC (Steel Pickling NESHAP); and the Indiana State Implementation Plan (SIP).

I. REGULATORY BACKGROUND

The permits and regulatory provisions relevant to this NOV/FOV are as follows:

Title V

a. Title V of the CAA, 42 U.S.C. §§ 7661a-7661f, establishes an operating permit program for certain sources, including "major sources." Pursuant to Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), on July 21, 1992, 57 Fed. Reg. 32295, the EPA promulgated regulations establishing the minimum elements of a permit program to be administered by any air pollution control agency. These regulations are codified at 40 C.F.R. Part 70 and are known as the Title V permit program.

b. 40 C.F.R. § 70.2 defines "major source," in part, as any stationary source belonging to a single major industrial grouping and that directly emits or has the

potential to emit 100 tons per year (tpy) of any air pollutant, as defined under Section 302 of the CAA, 42 U.S.C. § 7602.

c. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), 40 C.F.R. § 70.7(b), state that after the effective date of any permit program approved or promulgated under Title V of the CAA, no source subject to Title V may operate the source except in compliance with its Title V permit.

d. The EPA promulgated final interim approval of the Indiana Title V program on November 14, 1995, 60 Fed. Reg. 57191, and the program became effective on that date. Final full approval of the program was promulgated on December 4, 2001, 66 Fed. Reg. 62969.

e. The regulation at 40 C.F.R. § 70.6(b)(1) specifies that all terms and conditions in a permit issued under a Part 70 program, including any provisions designed to limit a source's potential to emit, are enforceable by the EPA under the CAA.

f. 326 Indiana Administrative Code (IAC) Part 2, Rule 7 sets forth the Indiana Title V Permit Program.

g. On December 14, 1995, 60 Fed. Reg. 57188, the EPA approved 326 IAC 2-7-5 as part of the Indiana SIP. 326 IAC 2-7-5 governs Title V permit content.

h. 326 IAC 2-7-5(1) provides that Title V permits shall incorporate emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of a Part 70 permit issuance.

i. On December 14, 1995, 60 Fed. Reg. 57188, the EPA approved 326 IAC 2-7-6 as part of the Indiana SIP. 326 IAC 2-7-6 governs Title V permit compliance requirements.

j. 326 IAC 2-7-6(1) provides that Title V permits issued under this rule shall contain requirements with respect to compliance certification, testing, monitoring, reporting and record keeping sufficient to assure compliance with the terms and conditions of a Part 70 permit consistent with Section 5(3) of this rule.

k. During the time of investigation in this NOV/FOV, the Burns Harbor Facility has operated under Title V Permit No. 127-6301-00001 issued by the Indiana Department of Environmental Management (IDEM) on December 27, 2007, Title V Renewal Permit, No. 089-40270-00318, issued on December 10, 2012, and Title V Operating Permit Renewal, T127-31788-00001, issued on August 12, 2014. Additionally, during the duration of time under investigation in this document, the Burns Harbor Facility has operated under various Minor Permit Modifications, Administrative Amendments, and Significant and Minor Source Modifications to its Title V Permit. The changes prompting these permits may

have affected the numbering of permit conditions. The following requirements are found in the Burns Harbor Facility Title V Permit(s):

i. Condition B.8 of ArcelorMittal's Title V Permit requires that ArcelorMittal submit compliance monitoring reports which are certified to be true, accurate, and complete.

ii. Condition B.10 of ArcelorMittal's Title V Permit requires that ArcelorMittal create and implement a Preventive Maintenance Plan that meets the requirements of this condition.

iii. Condition C.2 of ArcelorMittal's Title V Permit requires that opacity shall not exceed an average of forty percent in any one six-minute averaging period.

iv. Condition D.1.6 of ArcelorMittal's Title V Permit, incorporates the requirements set forth in 326 IAC 11-3-2, and states that visible emissions must not be present for more than 125 seconds during five consecutive charges.

v. Condition D.1.12 of ArcelorMittal's Title V Permit provides that the continuous opacity monitoring system installed on the coke battery number one and number two underfire stacks shall be calibrated, maintained, and operated in accordance with specified requirements.

vi. Condition D.1.15 of ArcelorMittal's Title V Permit sets forth coke oven battery record keeping requirements, including the requirement that coal samples must be collected for analysis once per week.

vii. Condition D.3.4 of ArcelorMittal's Title V Permit requires monitoring of the blast furnace granulation milling operations. The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, and shall be calibrated in accordance with the manufacturer's specifications.

viii. Condition D.4.4 of ArcelorMittal's Title V Permit requires testing for particulate emissions limitations at the sinter plant windbox scrubber stack and at the sinter plant de-dusting baghouse once every two years each.

ix. Condition D.4.6 of ArcelorMittal's Title V Permit requires that when the volatile organic compounds (VOCs) continuous emission monitors (CEMs) are malfunctioning or down for repairs or adjustments that the CEMs shall be returned to operation as quickly as practicable.

x. Condition D.5.6 of ArcelorMittal's Title V Permit requires the instrument used for determining pressure differential at the rail car dumper baghouse shall be calibrated or replaced at least once every six (6) months.

xi. Condition D.7.7 of ArcelorMittal's Title V Permit requires that, when the plate coating system is in operation, the Permittee must perform daily inspections and take reasonable responsive actions.

xii. Condition D.7.10 of ArcelorMittal's Title V Permit requires that ArcelorMittal keep records to document compliance with requirements applicable to the slab/plate mill complex, including the pressure drop across the baghouse controlling the shot blaster and weekly overspray requirements.

xiii. Condition D.7.11 of ArcelorMittal's Title V Permit requires that the monthly summary of the information to document the compliance status shall be submitted not later than 30 days after the end of the quarter being reported.

xiv. Condition D.9.3 of ArcelorMittal's Title V Permit requires NOx emissions from the hot dip coating line shall not exceed 2.99 pounds per hour (0.031 pounds per MMBtu).

xv. Condition D.9.7 (a) of ArcelorMittal's Title V Permit No. 127-31913-00001 requires eighty percent (80%) destruction efficiency for nitrogen oxides in the selective catalytic reduction/NOx control device (C672 6008), and the following operating parameters shall be maintained: (1) a minimum of 0.8 moles of ammonia per mole of NOx (condition eliminated as of August 12, 2014);

xvi. Condition D.12.1 of ArcelorMittal's Title V Permit incorporates the facility's Fugitive Particulate Matter Emission Control Plan.

xvii. Condition D.12.4 of ArcelorMittal's Title V Permit No. 127-31911-0001requires the average vehicle weight on slab hauler roads not to exceed 157 tons (condition eliminated as of August 12, 2014).

xviii. Condition D.13.2 of ArcelorMittal's Title V Permit requires that the cold cleaner degreaser control equipment must be operated in accordance with numerous requirements, including that the degreaser cover must be closed when parts are not being handled in the degreaser and that a label containing several operating requirements is provided.

xix. Condition D.14.5(b) (no longer effective as of August 12, 2014) required that ArcelorMittal record visible emissions notations for crushing operations.

xx. Conditions E.1.1 and E.1.2 of Arcelor Mittal's Title V Permit require that ArcelorMittal comply with the Coke Ovens PQBS NESHAP.

xxi. Condition E.2.2 of ArcelorMittal's Title V Permit provides that the facility is subject to Coke Oven Batteries NESHAP.

xxii. Condition E.3.1 and E.3.2 of ArcelorMittal's Title V Permit provides that the facility must comply with the provisions of the Iron and Steel NESHAP.

Iron and Steel NESHAP

a. The Burns Harbor Facility is subject to the requirements of the Iron and Steel NESHAP at 40 C.F.R. Part 63, Subpart FFFFF.

b. The following requirements are found in the Iron and Steel NESHAP:

i. 40 C.F.R. § 63.8 - Subject to certain exceptions, you must operate continuous monitoring systems continuously;

ii. 40 C.F.R. § 63.7790(a) - You must meet each emission limit and opacity limit in Table 1 to this subpart that applies to you;

iii. 40 C.F.R. § 63.7800(b) - You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in § 63.7790(b);

iv. 40 C.F.R. § 63.7830(a) - You must install, operate, and maintain a continuous parameter monitoring system for each capture system subject to an operating limit in § 63.7790(b)(1) in accordance with this section;

v. 40 C.F.R. § 63.7830(b) - You must conduct inspections of each baghouse at the specified frequencies according to the requirements in paragraphs (b)(4) of this section;

vi. 40 C.F.R. § 63.7830(c) - For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in § 63.7790(b)(2), you must install, operate, and maintain CPMS according to the requirements in § 63.7831(g) and monitor the hourly average pressure drop and water flow rate according to the requirements in § 63.7832;

vii. 40 C.F.R. § 63.7830(e) - You must compute and record a 30-day rolling average oil content and VOC emissions;

viii. 40 C.F.R. § 63.7831(g) - For each venturi scrubber subject to operating limits in § 63.7790(b)(2) for pressure drop and scrubber water flow rate, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section;

iv. 40 C.F.R. § 63.7832(a) - You must continuously monitor when an affected source is operating to demonstrate compliance, unless exceptions apply; and

vi. 40 C.F.R. § 63.8, which is part of the general provisions applicable to NESHAPs, generally requires that continuous monitoring systems are operated continuously.

Coke Oven Pushing, Quenching, and Battery Stacks (PQBS) NESHAP

a. The Burns Harbor Facility is subject to the Coke Oven PQBS NESHAP at 40 C.F.R. Part 63, Subpart CCCCC.

b. The following requirements are found in the Coke Oven PQBS NESHAP:

i. 40 C.F.R. § 63.7290(b) - For each capture system applied to pushing emissions, when using daily average fan motor amperes as the operating limit, you must maintain the daily average fan motor amperes at or above the minimum level established during the initial performance test;

ii. 40 C.F.R. § 63.7295(b) - You must wash baffles in quench towers each day that the tower is used to quench coke and must equip each quench tower with baffles such that no more than 5 percent of the cross-sectional area of the tower may be uncovered or open to the sky;

iii 40 C.F.R. § 63.7296 limits opacity from battery stacks to 15% as a daily average, as determined by a continuous opacity monitor;

iv. 40 C.F.R. § 63.7300(b) - You must prepare and operate at all times according to a written operation and maintenance plan for the general operation and maintenance of existing by-product coke oven batteries;

v. 40 C.F.R. § 63.7300(c) - You must prepare and operate at all times according to a written operation and maintenance plan for each capture system and control device applied to pushing emissions from an existing coke oven battery; and

vi. 40 C.F.R. § 63.7330(d) - For each capture system applied to pushing emissions, you must at all times monitor the fan motor amperes according to the requirements in 40 C.F.R. § 63.7331(h).

Coke Oven Batteries NESHAP

a. The Burns Harbor Facility is subject to the Coke Oven Batteries NESHAP at 40 C.F.R. Part 63, Subpart L.

b. The following requirements are found in the Coke Oven Batteries NESHAP:

i. 40 C.F.R. § 63.304(b)(2)(iii) - No owners or operators shall discharge emissions from a byproduct coke oven battery in excess of 2.5 percent leaking offtake systems; and

ii. 40 C.F.R. § 63.304(b)(3)(i) - No owners or operators shall discharge emissions from a byproduct coke oven battery in excess of 4.0 percent leaking coke oven doors on each tall byproduct coke oven battery.

Steel Pickling NESHAP

a. The Burns Harbor Facility is subject to the Steel Pickling NESHAP, 40 C.F.R. Part 63, Subpart CCC.

b. The following requirements are found in the Steel Pickling NESHAP:

i. 40 C.F.R. § 63.1161(b) - During the performance test for each emission control device, the owner or operator using a wet scrubber to achieve compliance shall establish site-specific operating parameter values for the minimum scrubber makeup water flow rate and, for scrubbers that operate with recirculation, the minimum recirculation water flow rate; and

ii. 40 C.F.R. § 63.1162(a)(2) and (4) - The fume scrubber water flow rate and differential pressure be continuously measured and recorded.

c. 40 C.F.R. Part 64 contains Compliance Assurance Monitoring (CAM) requirements for pollutant-specific emissions unit at a major source that is required to obtain a Part 70 or 71 permit and that satisfies all of the criteria in 40 C.F.R. § 64.2(a).

Indiana SIP

a. The Burns Harbor Facility is subject to the Indiana SIP.

b. The following requirements are found in the Indiana SIP:

i. 326 IAC 3-5-2 requires that an owner or operator must install and operate a continuous opacity monitoring system and that the system shall complete one cycle of operation for each successive ten second period. This regulation was approved as part of the Indiana SIP on October 23, 2013, 78 Fed. Reg. 63093;

ii. 326 IAC 5-1-2, governing visible emissions, became effective as part of the Indiana SIP, on June 16, 1997, 62 Fed. Reg. 18521;

iii. 326 IAC 5-1-2 provides that visible emissions shall not exceed 40% opacity on a six-minute average (24 consecutive readings);

iv. 326 IAC 6-4-2 provides that no Permittee shall allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located. The most recent revision of these rules was approved as part of the Indiana SIP on October 28, 1975, 40 Fed. Reg. 50032.

v. 326 IAC 6-6 provides that the sinter plant de-dusting baghouse stack shall be tested at least once in each two-year period to demonstrate compliance with particulate emission limitations.

vi. 326 IAC 8-3-2 provides operation and maintenance requirements for cold cleaner degreasers, including closing the cover when the degreaser is not operating and labeling the degreaser with a list of operating requirements. The most recent version of these rules was approved as a part of the Indiana SIP on July 25, 2014, 79 Fed. Reg. 43260.

vii. 326 IAC 11-3-2(b)(4) requires that emissions from the charging system shall not be visible for more than a cumulative total of one hundred twenty-five seconds during five consecutive charging periods. The most recent version of these rules was approved as a part of the Indiana SIP on June 15, 1995, 60 Fed. Reg. 31412.

viii. 326 IAC 11-3-2(d)(4) requires that emissions from the offtake piping shall not be permitted from more than ten percent of the total offtake piping on any coke oven battery. The most recent version of these rules was approved as a part of the Indiana SIP on June 15, 1995, 60 Fed. Reg. 31412.

ix. 326 IAC 11-3-2(f)(4) requires no visible emissions shall be permitted from more than ten percent (10%) of the total coke oven doors, plus four (4) doors, on any coke oven battery. The most recent version of these rules was approved as a part of the Indiana SIP on June 15, 1995, 60 Fed. Reg. 31412.

Section 113(a)(1)-(3) of the CAA, 42 U.S.C. § 7413(a)(1)-(3), authorizes the Administrator to initiate an enforcement action whenever, on the basis of any available information, the Administrator finds that any person has violated or is in violation of a requirement or prohibition of, among others, any implementation plan or permit, Title I or Title V of the CAA, or any rule promulgated, issued, or approved under Title I or Title V of the CAA.

II. EXPLANATION OF VIOLATIONS

The EPA found the following violations at the Burns Harbor Facility:

a. Sinter Plant VOC from Windbox Exhaust Emissions Monitoring

Regulated by: Title V Permit, Section E.3
Iron and Steel NESHAP, 40 C.F.R. § 63.7830(e)

Sources: Semiannual Deviation and Compliance Report: First-Second Half 2010; First Half 2011, First-Second Half 2012, First Half 2013

ArcelorMittal reported that it failed to monitor the 30-day rolling average of the daily average VOC emissions from the windbox exhaust on 3 days in 2010, 12 days in 2011, 9 days in 2012, 3 days in 2013.

b. Sinter Plant - Capture and Control Equipment

Regulated by: Title V Permit, Section E.3
Iron and Steel NESHAP, 40 C.F.R. §§ 63.7800(b), 63.7830

Sources: Semiannual Deviation and Compliance Reports: Second Half 2010; First-Second Half 2011; First-Second Half 2012; First-Second Half 2013; First-Second Half 2014; First-Second Half 2015; First-Second Half 2016; First-Second Half 2017; First Half 2018

ArcelorMittal reported:

i. Failure to meet windbox minimum differential pressure on 2 days in 2011 and 2 days in 2013;

ii. Failure to monitor windbox gas cleaning scrubber differential pressure on 14 days in 2012, and 1 day in 2013;

iii. Failure to monitor windbox scrubber water flow rate on 1 day in 2010 and 3 days in 2013;

iv. Failure to maintain a discharge end baghouse minimum air flow rate on 11 days in 2011; 14 days in 2012; 5 days in 2013; 3 days in 2014; 4 days in 2016; 5 days in 2017; and 1 day in 2018; and

v. Failure to monitor discharge end baghouse exhaust air flow rate on 1 day in 2011; 2 days in 2012; 2 days in 2014; 11 days in 2015; and 3 days in 2016.

c. Sinter Plant – Out of Control Monitoring of VOC Emissions from Windbox Exhaust

Regulated by: Title V Permit Sections D.4, E.1
General NESHAP for Source Categories, 40 C.F.R. § 63.8

Sources: Second Half 2010, First Half 2011, First-Second Half 2012, First Half 2013

ArcelorMittal reported that the monitoring system for VOC emissions from Windbox exhaust at the Sinter Plant experienced out-of-control periods on 5 days in 2010; 13 days in 2011; 5 days in 2012; and 1 day in 2013.

d. Blast Furnaces Opacity at Roof Monitors

Regulated by: Title V Permit Section E.3
Iron and Steel NESHAP, 40 C.F.R. § 63.7790(a), Tables 1 and 3

Sources: Semiannual Deviation and Compliance Report: Second Half 2011; First Half 2017

ArcelorMittal reported that on November 18, 2011, elevated opacity was recorded for 3, 6-minute averaging periods.

ArcelorMittal reported that, on April 3, 2017, a malfunction occurred resulting in opacity of 24% for 1, 6-minute averaging period at the C Blast Furnace.

e. Hot Dip Coating Line

Regulated by: Title V Permit, Section D.9

Sources: Quarterly Deviation and Compliance Monitoring Reports: Fourth Quarter 2012; First-Fourth Quarters 2013; First, Fourth Quarters 2014; Semiannual Reports: Second Half 2016

ArcelorMittal reported that it failed to maintain its NOx emissions below 2.99 lb/hr on 1 day in 2012; 3 days in 2013; 4 days in 2014; and 1 day in 2016.

f. Hot Dip Coating Line

Regulated by: Title V Permit No. 127-31913-00001, Section D.9.7

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second-Fourth Quarters 2011; First-Fourth Quarters 2012; First-Fourth Quarters 2013; First-Third Quarters 2014; Fourth Quarter 2015

ArcelorMittal reported that it failed to maintain at least 0.8 moles of ammonia per mole of NOx or failed to maintain the operating temperature of the SCR between 500F and 900F on 47 days in 2011; 164 days in 2012; 179 days in 2013; and 124 days in 2014.

ArcelorMittal reported that on 1 day in 2015 it failed to measure the NOx emissions from the coating line using a continuous emission monitor.

g. Fugitive Dust - Iron Beaching

Regulated by: Title V Permit, Section D.12
Indiana SIP 326 IAC 6-4-2

Source: Quarterly Deviation and Compliance Monitoring Reports: Second-Third Quarters 2011

ArcelorMittal reported that iron beaching activities caused particulate matter to cross the property line on 2 days in April; 5 days in May; 5 days in June; and 1 day in August 2011.

h. Entire Source Fugitive Dust - Iron Beaching

Regulated by: Title V Permit, Section C.2
Indiana SIP 326 IAC 5-1-2

Source: Quarterly Deviation and Compliance Monitoring Report: Second Quarter 2015

ArcelorMittal reported opacity from iron beaching in excess of 40% as a 6-minute average on June 3, 2015.

i. No. 1 Coke Oven Battery Stack Opacity

Regulated by: Title V Permit, Section C.2
Indiana SIP 326 IAC 5-1-2

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second Quarter 2011; First-Fourth Quarters 2012; First, Third-Fourth Quarters 2013; First-Second, Fourth Quarters 2014; First-Third Quarters 2015; First-Fourth Quarters 2016; Second-Fourth Quarter 2017; First, Third Quarter 2018

ArcelorMittal reported exceedances of the 40% as six-minute average opacity limit at its Coke Oven Battery #1 underfire stack, as monitored by its continuous opacity monitor for 9, six-minute averaging periods in 2011 (May-Dec); 8, six-minute averaging periods in 2012; 10, six-minute averaging periods in 2013; 129, six-minute averaging periods in 2014; 17, six-minute averaging periods in 2015; 28, six-minute averaging periods in 2016; 8, six-minute averaging period in 2017; and 7, six-minute averaging periods in 2018.

j. Coke Oven Battery Fugitive Opacity

Regulated by: Title V Permit, Section D.1.
Indiana SIP 326 IAC 11-3-2(b)(4), (d)(4), (f)(4)

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second-Third Quarters 2011; First-Third Quarters 2012; Second-Fourth Quarters 2013; First Quarter 2014; Fourth Quarter 2015; Fourth Quarter 2016; Second-Third Quarter 2017; Third Quarter 2018

Charging Systems (125 seconds, 5 charges):
ArcelorMittal reported 1 event in 2012; 3 events in 2013; and 1 event in 2016 at No. 1 Coke Oven Battery. ArcelorMittal reported 2 events in 2013 at No. 2 Coke Oven Battery.

Offtake Piping (10% offtake piping):
ArcelorMittal reported 2 events in 2011; 2 events in 2012; 3 events in 2013; 1 event in 2014; 3 events in 2017; and 1 event in 2018 at No. 1 Coke Oven Battery. ArcelorMittal reported 1 event in 2012 at No. 2 Coke Oven Battery.

Oven Doors (10% oven doors):
ArcelorMittal reported 1 event in 2011; 1 event in 2012; 2 events in 2013; 1 event in 2014; and 1 event in 2015 at No. 1 Coke Oven Battery. ArcelorMittal reported 1 event in 2012 at No. 2 Coke Oven Battery.

Gas Collector Main:
ArcelorMittal reported 1 event in 2017.

k. Coke Oven Battery #2 Pushing Baghouse Operation and Maintenance

Regulated by: Title V Permit, Section E.2
Coke Oven PQBS NESHAP, 40 C.F.R. § 63.7300(b)

Sources: Semiannual Deviation and Compliance Monitoring Reports: First Half 2011; Second Half 2013

ArcelorMittal reported a failure to operate the baghouse associated with the No. 2 Coke Oven Battery for one push on February 2, 2011 and July 8, 2013.

l. Coke Oven Battery Pushing Baghouse Fan Amperage

Regulated by: Title V Permit, Section E.1
Coke Oven PQBS NESHAP, 40 C.F.R. § 63.7330(d)

Sources: Semiannual Deviation and Compliance Monitoring Report: First Half 2010; Second Half 2011; Second Half 2012; Second Half 2014; First Half 2016; Second Half 2017; First Half 2018

ArcelorMittal reported that it failed to record fan amperage for the pushing emissions control system on 2 days in 2010; 3 days in 2011; 1 day in 2012; 2 days in 2014; 6 days in 2017; and 10 days in 2018.

ArcelorMittal reported that it failed to meet the daily average minimum fan motor amperage limit on 2 days in 2016.

m. Coke Oven Battery Pushing Baghouse Quench Baffles

Regulated by: Title V Permit, Section E.
Coke Oven PQBS NESHAP 40 C.F.R. § 63.7295(b)(1)

Source: Semiannual Deviation and Compliance Monitoring Report: Second Half 2011; First Half 2014

ArcelorMittal reported that it failed to wash the quench baffles on 3 days in 2010; 14 days in 2011; and 4 days in 2014.

n. Nos. 1 and 2 Coke Oven Battery Quench Station

Regulated by: Title V Permit, Section E.1; D.1
Coke Oven PQBS NESHAP, 40 C.F.R. § 63.7295(b)(1)

Source: Semiannual Deviation and Compliance Monitoring Reports: Second Half 2011; Second Half 2015

Quarterly Deviation and Compliance Monitoring Report: Third Quarter 2018

ArcelorMittal reported that it failed to equip the No. 2 Coke Oven Battery quench tower with baffles such that no more than 5% of the cross-sectional area of the tower was uncovered or open to the sky for 25 days in 2011; and on 2 days in 2015.

ArcelorMittal reported that it exceeded the 7-day laboratory hold period for TDS samples from the Coke Oven Battery Nos. 1 and 2 Quench Station in September 2018.

o. Pickling Line Parametric Monitoring

Regulated by: Title V Permit, Section E.4
Steel Pickling NESHAP, 40 C.F.R. § 63.1162(a)(2) and (4)

Sources: Semiannual Deviation and Compliance Monitoring Reports: First-Second Half 2010; First Half 2013; First Half 2015

ArcelorMittal reported a failure to continuously measure and record fume scrubber flow rate and differential pressure for 2.57 hours in 2010; 0.50 hours in 2013; and 2.27 hours in 2015.

p. Pickling Line Scrubber Flow Rate

Regulated by: Title V Permit, Section E.4
Steel Pickling NESHAP, 40 C.F.R. § 63.1161(b)

Sources: Semiannual Deviation and Compliance Monitoring Reports: Second Half 2012; First Half 2013; Second Half 2014; Second Half 2015; Second Half 2017; First Half 2018

ArcelorMittal reported a failure to attain scrubber flow rate within permitted range for 3.29 hours in 2012; 0.05 hours in 2013; 5.1 hours in 2014; 0.07 hours in 2015; 72.2 hours in 2017; and 0.1 hours in 2018.

q. Roads Fugitive Dust Plan

Regulated by: Title V Permit No. 127-31911-0001, Section D.12

Sources: Quarterly Deviation and Compliance Monitoring Reports: First Quarter 2010 -Third Quarter 2014

ArcelorMittal reported that the average vehicle weight on slab hauler roads exceeded 157 tons. ArcelorMittal reported that monthly vehicle inspections were missing for some vehicles.

r. Blast Furnaces - Capture and Control Equipment Operation and Maintenance

Regulated by: Title V Permit, Section E.3
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Sources: Semiannual Deviation and Compliance Reports: First-Second Half 2011; First-Second Half 2012; First-Second Half 2013; First-Second Half 2014; First-Second Half 2015; First-Second Half 2016; and First-Second Half 2017; First Half 2018

ArcelorMittal reported:

i. Failure to meet minimum control device airflows at the C Blast Furnace tapping hoods on 26 days in 2011; 9 days in 2012; 10 days in 2013; 17 days in 2014; 4 days in 2015; 22 days in 2016; 47 days in 2017; and 11 days in 2018.

ii Failure to meet minimum control device airflows at the C Blast Furnace tilting runner hoods on 22 days in 2011; 5 days in 2012; 3 days in 2013; 14 days in 2014; 3 days in 2015; 14 days in 2016; 8 days in 2017; and 3 days in 2018.

iii. Failure to meet minimum control device airflows at the D Blast Furnace tapping hoods on 78 days in 2011; 33 days in 2012; 24 days in 2013; 22 days in 2014; 18 days in 2015; 78 days in 2016; 32 days in 2017; and 11 days in 2018.

iv. Failure to meet minimum control device airflows at the D Blast Furnace tilting runner hoods on 38 days in 2011; 13 days in 2012; 22 days in 2013; 22 days in 2014; 12 days in 2015; 47 days in 2016; 13 days in 2017; and 11 days in 2018.

s. Blast Furnaces -- Monitoring Equipment

Regulated by: Title V Permit, Condition E.3
Iron and Steel NESHAP, 40 C.F.R. §§ 63.7830(a), 63.7832(a)

Source: Semiannual Deviation and Compliance Reports: First-Second Half 2010; First-Second Half 2011; First-Second Half 2012; First-Second Half 2013; First-Second Half 2014; First-Second Half 2015; First-Second Half 2016; and First-Second Half 2017; First Half 2018

ArcelorMittal reported:

i. Continuous or intermittent failure to monitor control device airflows at the C Blast Furnace east tapping hoods on 2 days in 2010; 3 days in 2011; 3 days in 2012; 11 days in 2015; 7 days in 2016; 17 days in 2017; and 1 day in 2018.

ii Continuous or intermittent failure to monitor control device airflows at the C Blast Furnace east tilting runner hoods on 3 days in 2010; 3 days in 2011; 3 days in 2012; 118 days in 2015; 35 days in 2016; 2 days in 2017; and 5 days in 2018.

iii. Continuous or intermittent failure to monitor control device airflows at the C Blast Furnace west tapping hoods on 5 days in 2010; 3 days in 2011; 3 days in 2012; 1 day in 2014; 25 days in 2015; 8 days in 2016; and 7 days in 2017.

iv. Continuous or intermittent failure to monitor control device airflows at the C Blast Furnace west tilting runner hoods on 3 days in 2010; 1 days in 2011; 1 day in 2012; 5 days in 2014; 128 days in 2015; 12 days in 2016; 5 days in 2017; and 2 days in 2018.

v. Continuous or intermittent failure to monitor control device airflows at the D Blast Furnace east tapping hoods on 6 days in 2010; 2 days in 2011; 2 days in 2012; 1 day in 2013; 10 days in 2014; 9 days in 2015; 12 days in 2016; 6 days in 2017; and 2 days in 2018.

vi. Continuous or intermittent failure to monitor control device airflows at the D Blast Furnace east tilting runner hoods on 8 days

in 2010; 3 days in 2011; 4 days in 2012; 1 day in 2013; 148 days in 2015; 10 days in 2016; 10 days in 2017; and 5 days in 2018.

vii. Continuous or intermittent failure to monitor control device airflows at the D Blast Furnace west tapping hoods on 6 days in 2010; 5 days in 2011; 6 days in 2012; 1 day in 2013; 3 days in 2014; 2 days in 2015; 10 days in 2016; 5 days in 2017; and 3 days in 2018.

viii. Continuous or intermittent failure to monitor control device airflows at the D Blast Furnace west tilting runner hoods on 7 days in 2010; 1 day in 2011; 1 day in 2012; 2 days in 2013; 5 days in 2014; 150 days in 2015; 6 days in 2016; 7 days in 2017; and 3 days in 2018.

t. Blast Furnaces – O&M Inspections

Regulated by: Title V Permit, Section E.3
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)(1)

Sources: Semiannual Deviation and Compliance Reports: First Half 2013; First-Second Half 2015; First-Second Half 2016; and First-Second Half 2017; First Half 2018

ArcelorMittal reported that some elements of the weekly, monthly, bi-monthly, and semiannual inspections at C and D Blast Furnaces were not completed within the proper time during the first half of 2013; the first and second halves of 2015; the first and second halves of 2016; the first and second halves of 2017; and the first half of 2018.

u. BOF Shop – Capture and Control Equipment O&M

Regulated by: Title V Permit, Section E.1
Iron and Steel NESHAP, 40 C.F.R. § 63.7800(b)

Sources: Semiannual Deviation and Compliance Reports: First-Second Half 2010; First-Second Half 2011; First-Second Half 2012; First Half 2013; First Half 2014; First-Second Half 2015; First-Second Half 2016; and Second Half 2017

ArcelorMittal reported:

i. Failure to meet minimum collection systems airflows on the #1 BOF vessel on 5 days in 2011; 3 days in 2012; 4 days in 2013; 1 day in 2015; 6 days in 2016; and 1 day in 2017;

ii. Failure to monitor collection system airflows on the #1 BOF vessel on 1 day in 2017;

iii. Failure to meet minimum collection systems airflows on #2 BOF vessel on 1 day in 2012; 1 day in 2015; 1 day in 2016; and 1 day in 2017;

iv. Failure to meet minimum collection systems airflows on #3 BOF vessel on 4 days in 2010; 3 days in 2012; 2 days in 2015; and 1 day in 2016;

v. Failure to record collection systems airflows on #3 BOF vessel on 1 day in 2011 and 3 days in 2012;

vi. Failure to record collection systems airflows on #2 BOF vessel on 1 day in 2012; 1 day in 2014; and 1 day in 2017;

vii. Failure to record average differential pressure across the #2-3-4 scrubbers on 1 day in 2016; and

viii. Failure to timely enter weekly confirmation of dust removal, to take action to remedy alarms, document the remedy, or to alarm or record readings as specified in the O&M Plan associated with the BOF shop operations on 20 days in 2010; 6 days in 2011; and 1 day in 2012.

v. Blast Furnace Granulated Coal Injector Baghouse #1 and #2

Regulated by: Title V Permit, Section D.3

Sources: Quarterly Deviation and Compliance Monitoring Report: Second Quarter 2011

ArcelorMittal reported that the annual calibration of the differential pressure sensor for GCI system #1 and #1 baghouses was not completed on time in 2011.

w. Equipment Calibration and Inspection

Regulated by: Title V Permit, Section B.10

Sources: Quarterly Deviation and Compliance Monitoring Reports: Second -Fourth Quarters 2011; First–Fourth Quarters 2012; First–Third Quarters 2013; First-Second, Fourth Quarters 2014; First Quarter 2015; Second-Fourth Quarters 2016; Second-Third Quarters 2018

ArcelorMittal reported that Preventative Maintenance Plan inspections and/or calibrations were not fully implemented in second-fourth quarters of 2011; first – fourth quarters of 2012; first–third quarters of 2013; first-second, fourth quarters of 2014; first quarter of 2015; second-fourth quarters of 2016; and second-third quarters of 2018.

x. No. 1 Coke Oven Battery – Offtake Piping Visible Emissions (Fed 30-Day Average Limit)

Regulated by: Title V Permit, Section E.2
Coke Oven Batteries NESHAP, 40 C.F.R. § 63.304(b)(2)(iii)

Source: Quarterly Deviation and Compliance Monitoring Report: First Quarter 2014; Third Quarter 2018

ArcelorMittal reported an exceedance of the 30-day rolling average Method 303 visible emission standard for offtake piping during the month of February 2014.

ArcelorMittal reported an exceedance of the leaking rate at the No. 1 Coke Oven Battery Offtake Piping during the month of August 2018.

y. No. 1 Coke Oven Battery – Oven Doors Visible Emissions (Fed. 30-Day Average Limit)

Regulated by: Title V Permit, Section E.2
Coke Oven Batteries NESHAP, 40 C.F.R. § 63.304(b)(3)(i)

Sources: Quarterly Deviation and Compliance Monitoring Report: Fourth Quarter 2010; First Quarter 2014

ArcelorMittal reported an exceedance of the 30-day rolling average Method 303 visible emission standard for coke oven doors during the months of October 2010 and March 2014.

z. No. 1 Coke Oven Battery – Underfire Stack Continuous Opacity Monitor Downtime

Regulated by: Title V Permit, Section D.1
Indiana SIP 326 IAC 3-5-2

Sources: Quarterly Deviation and Compliance Monitoring Reports: First Quarter 2010-Third Quarter 2018

ArcelorMittal reported continuous opacity monitor downtime at the No. 1 Coke Oven Battery underfire stack for a total of 8.0 hours in 2010; 9.1 hours in 2011; 11.0 hours in 2012; 8.4 hours in 2013; 9.3 hours in 2014; 15.3 hours in 2015; 27.5 hours in 2016; 18.8 hours in 2017; and 7.1 hours in 2018.

aa. No. 2 Coke Oven Battery – Underfire Stack Continuous Opacity Monitor Downtime

Regulated by: Title V Permit, Section D.1

Indiana SIP 326 IAC 3-5-2

Sources: Quarterly Deviation and Compliance Monitoring Reports: First Quarter 2010-Third Quarter 2018

ArcelorMittal reported continuous opacity monitor downtime at the No. 2 Coke Oven Battery underfire stack for a total of 8.3 hours in 2010; 4.2 hours in 2011; 13.6 hours in 2012; 4.1 hours in 2013; 42.7 hours in 2014; 7.1 hours in 2015; 45.6 hours in 2016; 11.0 hours in 2017; and 2.2 hours in 2018.

bb. No. 1 Coke Oven Battery –Underfire Stack Daily Average Opacity Operating Limit

Regulated by: Title V Permit, Section E.1
Coke Ovens PQBS NESHAP, 40 C.F.R. § 63.7296

Sources: Quarterly Deviation and Compliance Monitoring Reports: First Half 2011; Second Quarter 2014; First Quarter 2015; Second Quarter 2016

ArcelorMittal reported deviations of the daily 15% opacity daily average operating limit (normal coking time) on 1 day in 2011; 3 days in 2014; 2 days in 2015; and 1 day in 2016.

cc. No. 1 & 2 Coke Oven Batteries – Minimum Fan Amp Operating Limit

Regulated by: Title V Permit, Section E.1
Coke Ovens PQB NESHAP, 40 C.F.R. § 63.7290(b)

Sources: Semiannual Compliance Monitoring and Deviation Report: First-Second Half 2010; First Half 2011; Second Half 2012; Second Half 2013; First Half 2016; Second Half 2017

ArcelorMittal reported that the minimum daily average fan motor amperage operating limit at the No.1 and No. 2 pushing emission control baghouses were not maintained on 1 day in 2010 (both); 1 day in 2010 (No. 1 only); 2 days in 2010 (No. 2 only; 1 day in 2011 (No. 2 only); 1 day in 2012 (No. 1 only); 1 day in 2013 (No. 1 only); 2 days in 2016 (No. 1 only); and 2 days in 2017 (No. 1 only).

dd. No. 1 & 2 Coke Oven Batteries – Operation and Maintenance

Regulated by: Title V Permit, Section E.1
Coke Ovens PBQ NESHAP, 40 C.F.R. § 63.7300(c)

Source: Semiannual Compliance Monitoring and Deviation Reports: First Half 2014

ArcelorMittal reported that weekly coke oven battery O&M baghouse inspections were not performed on 1 day in 2014 and that baffle washing was not recorded on four days in 2014.

ee. No. 1 & 2 Coke Oven Batteries – Coal Sample Analysis/Records

Regulated by: Title V Permit, Section D.1.5

Source: Annual Compliance Certification: 2012

ArcelorMittal reported that weekly coal sample analyses were missed for two weeks in 2012.

ff. BOF – Roof Monitor Opacity (20%, 3-minute avg.)

Regulated by: Title V Permit, Section E.3
Iron and Steel NESHAP, 40 C.F.R. § 63.7790(a), Table 1

Source: Semiannual Deviation and Compliance Monitoring Report: Second Half 2012

ArcelorMittal reported the following exceedances of the 20%, 3-minute opacity standard that occurred during performance testing at the BOF: 26% on 12/13/2012; 23% on 12/17/2012; and 41% on 12/19/2012.

gg. Sinter Plant – Sinter Cooler Opacity (10%, 6-minute avg.)

Regulated by: Title V Permit, Section E.3
Iron and Steel NESHAP, 40 C.F.R. § 63.7790(a), Table 1

Source: Semiannual Deviation and Compliance Monitoring Report: Second Half 2014

ArcelorMittal reported seven unspecified exceedances of the 10%, 6-minute average opacity limit at the sinter cooler during performance testing on 9/16/2014.

hh. Sinter Plant - Method 5 Compliance Demonstration at Wind Box Scrubber and De-Dust Baghouse

Regulated by: Title V Permit, Section D.4.4
Indiana SIP 326 IAC 6-6

Source: Annual Compliance Certification: 2011

ArcelorMittal reported that the Method 5 compliance demonstrations at windbox scrubber and de-dust baghouse required every two years were completed late.

ii. Sinter Plant – Inspections and Calibrations

Regulated by: Title V Permit, Section E.3
Iron and Steel NESHAP, 40 C.F.R. §§ 63.7830(b)-(c), 63.7831(g)

Sources: Semiannual Deviation and Compliance Monitoring Report: First Half 2011; First Half 2012; Second Half 2013

ArcelorMittal reported that, from 5/1/11-5/7/11, weekly inspections of ID fans 1A and 1B were not completed and weekly inspection of the scrubber disc, throat, and hydraulics were not completed; first quarter 2012 fan inspection was missed; and 2013 annual windbox scrubber recirculating flow monitor calibration was not completed on time.

jj. Insignificant Activities – Parts Washers – Miscellaneous O&M

Regulated by: Title V Permit, Section D.13
Indiana SIP 326 IAC 8-3-2

Sources: Annual Compliance Certifications: 2011, 2012, 2013

ArcelorMittal reported that the following cold cleaner degreaser operating requirements were not met: three parts washers had lids open in Hot Rolling on 10/31/11, a drain was not working on parts washer on 12/21/11, one parts washer with a solvent reservoir and one without a solvent reservoir did not have proper instructions posted on 12/21/11, and one parts washer was found unattended with the lid open in 2012 (date unspecified) and on 11/05/13.

kk. 160" Plate Mill – Plate Coating System – Miscellaneous Operation and Maintenance

Regulated by: Title V Permit T127-31788-00001, Section D.7

Source: Annual Compliance Certification: 2012; Quarterly Deviation and Compliance Monitoring Report: Third Quarter 2018

ArcelorMittal reported that preventative maintenance requirements for the filter system and overspray were not properly implemented in 2012.

ArcelorMittal reported that the daily PM inspection for the Plate Mill Coating Booths was not documented from July 12–14, 2018.

ll. 160" Plate Mill – Plate Coating System – Recordkeeping

Regulated by: Title V Permit, Section D.7

Source: Annual Compliance Certifications: 2012, 2013

ArcelorMittal reported that not all required records of preventative maintenance activity at the shop blaster and coating system were maintained in 2012; inspection logs and shot blaster baghouse pressure drop records were incomplete in the third and fourth quarters of 2012 and first quarter 2013; weekly overspray checks were incomplete in first quarter 2013; and records of daily pressure differential checks performed at the Shot Blaster Baghouse were not maintained for the period of 11/14/14 to 12/17/14.

mm. Plating Operations – Parametric Monitoring

Regulated by: Title V Permit, Section D.7

Sources: Annual Compliance Certification: 2013
Quarterly Deviation Report of the Third Quarter 2017; First Quarter 2018.

ArcelorMittal reported errors occurred in the electronic collection of daily pressure differential values required at the Shot Blaster baghouse resulting in missing values in the first quarter and part of second quarter 2013; improper records retention of seven daily and one weekly plate mill coating booth visual inspections in 2017; and seven daily and one weekly plate mill coating visual inspections in 2018.

nn. Blast Furnaces – Car Dumper Baghouse

Regulated by: Title V Permit, Section D.5
40 C.F.R. Part 64

Sources: Quarterly Deviation and Compliance Monitoring Report: First, Fourth Quarters 2010; Second, Fourth Quarters 2011; Fourth Quarter 2012; Second Quarter 2013; Second Quarter 2015

ArcelorMittal reported that the six-month calibration of the North and South pressure differential measuring instrument was not performed timely twice in 2011; and once in 2012, 2013 and 2015; and that records were not properly kept twice in 2010.

oo. Visible Emissions Notations - Crushing

Regulated by: Title V Permit, Section D.14
Indiana SIP 326 IAC 2-7-6(1)

Source: Quarterly Deviation and Compliance Monitoring Report: First Quarter 2010

ArcelorMittal reported a missing visible emissions notation record for 1 day in 2010.

pp. Nos. 1 & 2 Weigh Hopper Baghouses – Monitoring Downtime

Regulated by: Title V Permit Condition D.6.10

Source: Quarterly Deviation and Compliance Monitoring Report: Second Quarter 2018

ArcelorMittal reported monitoring downtime occurring at the #1 and #2 Weight Hopper Baghouses for daily DP capture in June 2018.

III. ENVIRONMENTAL IMPACT OF VIOLATIONS

a. Violation of the opacity standards increases public exposure to unhealthy particulate matter. Particulate matter, especially fine particulate, contributes to respiratory problems, lung damage and premature deaths.

b. Ground level concentrations of SO_2 contribute to respiratory illness, particularly in children and the elderly and aggravate existing heart and lung diseases. Peak levels of SO_2 in the ambient air can cause temporary breathing difficulty for people with asthma who are active outdoors. Longer-term exposures to high levels of SO_2 gas and particles cause respiratory illness and aggravate existing heart disease.

c. Violations of the monitoring, recordkeeping and reporting requirements prevent U.S. EPA from knowing whether an affected facility has maintained compliance with the applicable emission standards.

4/1/19
Date

Edward Nam
Director
Air and Radiation Division